2004-2005 Graduate and Professional Catalog (1.0)

UMKC

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General Program Information and Accreditation

Program Accreditation

The University of Missouri-Kansas City is affiliated with, through accreditation, approval or membership in the organizations listed below:

- Accreditation Board of Engineering and Technology (1977)
- American Assembly of Collegiate Schools of Business (1969)
- American Association of Dental Schools (1942)
- American Association of Colleges of Pharmacy (1945)
- American Association of University Women (1959)
- American Association of Colleges for Teacher Education (1960)
- American Bar Association (1938)
- American Chemical Society (1957)
- American Council on Education (1945)
- American Council on Pharmaceutical Education (1945)
- American Psychological Association
- Association of American Colleges and Universities (AAC&U)
- Association of American Law Schools (1938)
- Association of University Evening Colleges (1955)
- The Central Exchange
- The Civic Council of Greater Kansas City
- Commission on Accreditation of Dental and Dental Auxiliary Educational Programs of the American Dental Association (1927)
- Council of Graduate Schools (1967)
- Fullbright Associates
- Great Čities Universities
- The Greater Kansas City Chamber of Commerce
- International Relations Council
- International Womens Forum
- Kansas City Area Development Council
- Kansas City Area Life Sciences Institute
- Liaison Committee of Medical Education of the American Medical Association and Association of American Medical Colleges (1971)
- National Association of Schools of Music (1938)
- National Association of Schools of Public Affairs and Administration (1980)
- National Association of Schools of Theater (1970)
- National Association of State Universities and Land Grant Colleges (NASULGC)
- National Collegiate Athletic Association (1987)
- National Council for Accreditation of Teacher Education (1961)
- Commission on Collegiate Nursing Education (2000)
- North Central Association of Colleges and Secondary Schools (1938)

Degree Programs and Emphasis Areas

Degree programs (majors) are listed in capital letters. The actual degrees to be earned – bachelor's, master's, etc., are shown in parentheses, followed by emphasis areas for the degree program.

- ACCOUNTING (M.S.)
- ADVANCED EDUCATION IN GENERAL DENTISTRY (Graduate Certificate)
- ART HISTORY (M.A.)
- BIOLOGY (M.A., M.S.)

- BUSINESS ADMINISTRATION (M.B.A.) Entrepreneurship (M.B.A.) Finance (M.B.A.) Health Services Administration (M.B.A.) International Business (M.B.A.) Management (M.B.A.) Management of Information Systems (M.B.A.) Marketing (M.B.A.) Operations Management (M.B.A.)
- CELLULAR AND MOLECULAR BIOLOGY (M.S.) General (M.S.) Biochemistry (M.S.)
- CHEMISTRY (M.S.) Analytical Chemistry (M.S.) Inorganic Chemistry (M.S.) Organic Chemistry (M.S.) Physical Chemistry (M.S.) Polymer Chemistry (M.S.)
- CIVIL ENGINEERING (M.S.)
- COMPUTER SCIENCE (M.S.) Computer Networking (M.S.) Software Architecture (M.S.) Telecommunications Networking (M.S.)
- CONDUCTING (M.M., D.M.A.)
- COUNSELING AND GUIDANCE (M.A., Ed.S.) General (M.A., Ed.S.) Marriage and Family Counseling (M.A., Ed.S.) Mental Health Counseling (M.A., Ed.S.) School Counseling (Ed.S.) School Counseling and Guidance (M.A.) Substance Abuse Counseling (M.A., Ed.S.)
 COUNSELING PSYCHOLOGY (Ph.D.)
- COUNSELING FSTCHOLOGT (FILD.)
 CRIMINAL JUSTICE AND CRIMINOLOGY (M.S.)
- CURRICULUM AND INSTRUCTION (M.A., Ed.S.)
- CORRECTION (M.A., Ed.S.) General (M.A.)
 Curriculum Theory and Leadership (Ed.S.)
 Early Childhood Education (M.A., Ed.S.)
 Elementary or Middle School Specialty (M.A., Ed.S.)
 Elementary Education (M.A.)
 English as a Second Language (Teaching and Non-teaching) (M.A.)
 Subject Matter Specialty (M.A., Ed.S.)
 Urban Teaching (M.A.)
- DENTAL HYGIENE EDUCATION (M.S.) General (M.S.) Research (M.S.)
- DENTISTRY (D.D.S.)
- ECONOMICS (M.A.) Applied Urban Economics (M.A.)
- EDUCATION (Ed.D)
- EDUCATIONAL ADMINISTRATION (M.A., Ed.S.) General (M.A., Ed.S.) Elementary School Administration (M.A., Ed.S.) Higher Education Administration (M.A., Ed.S.) Secondary School Administration (M.A., Ed.S.) Special Education (Ed.S.)
- EDUCATIONAL RESEARCH AND PSYCHOLOGY (M.A.) General (M.A.) Research (M.A.)
- ELECTRICAL ENGINEERING (M.S.)
- ENDODONTICS (Graduate Certificate)
- ENGLISH (M.A.)
- Professional Writing (M.A.)
- HISTORY (M.A.)
- LAW (J.D., LL.M.)
- LIBERAL STUDIES (M.A.)
- MATHEMATICS AND STATISTICS (M.A., M.S.)
- MECHANICAL ENGINEERING (M.S.)
 MEDICINE (M.D.)
- MEDICINE (M.D.)

- MULTI-INTERDISCIPLINARY DOCTORAL STUDIES (Ph.D.)
- MUSIC (M.A.) Music Therapy (M.A.)
- MUSIC COMPOSITION (M.M., D.M.A.)
- MUSIC EDUCATION (B.M.E., M.M.E.) General (B.M.E., M.M.E.)
- Choral (M.M.E)
- Instrumental (M.M.E.)
- MUSIC HISTORY AND LITERATURE (M.M.)
- MUSIC THEORY (M.M.)
- NURSING (R.N.-M.S.N., M.S.N., Ph.D.)
- ORAL AND MAXILLOFACIAL RADIOLOGY (Graduate Certificate)
- ORAL AND MAXILLOFACIAL SURGERY (Graduate Certificate)
- ORAL BIOLOGY (M.S.)
- ORAL MEDICINE (Graduate Certificate)
- ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS (Graduate Certificate)
- PEDIATRIC DENTISTRY (Graduate Certificate)
- PERFORMANCE (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

General (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Accordion (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Bassoon (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Cello (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Clarinet (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Euphonium (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Flute (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Guitar (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

- Horn (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)
- Oboe (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)
- Organ (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Percussion (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Piano (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Saxophone (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

String Bass (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Trombone (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Trumpet (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Tuba (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Viola (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Violin (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Voice (Performer's Certificate, M.M., Artist's Certificate, D.M.A.)

Woodwinds (Performer's Certificate, M.M. Artist's Certificate)

- PERIODONTICS (Graduate Certificate)
- PHARMACEUTICAL SCIENCES (M.S.)

Pharmaceutical Chemistry (M.S.) Pharmaceutics (M.S.) Pharmacology (M.S.) Toxicology (M.S., M.A.)

- PSYCHOLOGY (M.A., Ph.D.)
- PUBLIC ADMINISTRATION (M.P.A.) Early Childhood Leadership (M.P.A.) Gerontology Administration (M.P.A.) Health Services Administration (M.P.A.) Human Resources Management (M.P.A.) Information Operations (M.P.A.) Nonprofit Management (M.P.A.) Organizational Behavior (M.P.A.) Urban Administration (M.P.A.)
- READING EDUCATION (M.A., Ed.S.)
- ROMANCE LANGUAGES AND LITERATURE (M.A.)
 SOCIAL WORK (M.S.W.)
 - UMKC/UM-COLUMBIA/UM-ST. LOUIS COOPERATIVE PROGRAM (M.S.W.)
- SOCIOLOGY (M.A.)
- SPECIAL EDUCATION (M.A.) General (M.A.) Behavior Disorders (M.A.) Learning Disabilities (M.A.)
- STUDIO ART (M.A.)TAXATION (LL.M.)
- THEATER (M.A.)
- THEATER: ACTING AND DIRECTING (M.F.A.) Acting (M.F.A.)
- Directing (M.F.A.)
- THEATER: DESIGN AND TECHNOLOGY (M.F.A.) Design (M.F.A.) Technology (M.F.A.)
- URBAN ENVIRONMENTAL GEOLOGY (M.S.)
- WASTE MANAGEMENT (Graduate Certificate)

General Graduate Academic Regulations and Information

School of Graduate Studies 300F Administrative Center 5115 Oak Street (816) 235-1161 Fax: (816) 235-1310 graduate@umkc.edu http://www.umkc.edu/sgs

Mailing Address

University of Missouri-Kansas City School of Graduate Studies 5100 Rockhill Road Kansas City, MO 64110-2499

Dean:

Ronald A. MacQuarrie

Mission and Administrative Organization of Graduate Education

UMKC currently offers more than 50 graduate degrees at the master's, educational specialist and doctoral levels, plus a number of graduate certificates. Graduate students represent about 26 percent of the total campus enrollment. The graduate student population is diverse in ethnicity, gender and racial background. As an urban university, our programs strive to accommodate adult working students. Nearly two-thirds of all graduate students are enrolled part-time and the average age is 35.

The Graduate Council, representing a cross section of campus graduate faculty, sets policy, establishes minimum graduate education standards and monitors the quality of graduate education at UMKC. The graduate faculty in the various graduate degree programs may set standards more stringent than the minimums outlined in this catalog section, and in such cases, the program standards take precedence over the campuswide minimum regulations. The School of Graduate Studies is responsible for monitoring compliance to the campuswide minimum graduate academic regulations; providing leadership and coordination of all graduate programs; and serves as the academic home for students admitted to the Interdisciplinary Ph.D. program. Information on the I.Ph.D. program may be found in the School of Graduate Studies section of this catalog.

Admission Policies and Procedures

Graduate admission committees in each academic unit review applications and make recommendations for admission. Applicants must satisfy both the general campus requirements and the program-specific admission criteria for graduate study. The minimum general requirements follow.

Graduate Admission Requirements

The following are minimum requirements for admission to graduate study in all UMKC graduate programs except the combined R.N. to M.S.N. option in the School of Nursing:

- 1. A bachelor's or first-level professional degree from a regionally accredited institution.
- 2. A satisfactory academic record.

For program-specific requirements, applicants should consult the pertinent degree program listing in this catalog.

Many UMKC graduate degree programs require satisfactory scores from either the Graduate Record Examination (general and/or subject tests), the Miller Analogies Test or the Graduate Management Admissions Test. Other academic units may require other national examinations. Test applications and information can be obtained from the UMKC Counseling, Health, and Testing Center, (816) 235-**1635**, or by writing the Educational Testing Service, P.O. Box 6004, Princeton, NJ 08541-6004.

Graduate Study Application Procedure

In general, applications for admission to graduate study should be obtained from and returned to the Admissions office. Complete contact information for admissions can be found at the beginning of the General Undergraduate Admissions Policies and Procedures section of this catalog.

Because some academic units have special application packets, applicants requesting application materials should be sure to specify the program to which they plan to apply. Admission to a degree program is subject to the recommendations of the graduate faculty in the degree program area and the dean of the academic unit in which the program is offered. Graduate admission decisions by the academic dean or designated representative are final.

Applicants must submit an official transcript from the school where their bachelor's degrees were obtained. Unless the transcript of the degree-granting institution includes the complete record of undergraduate work taken at all other schools, an official transcript from each of the other institutions also must be supplied. In addition, applicants must submit an official transcript from each school where other coursework has been taken or degrees have been obtained after the bachelor's degree. All credentials submitted in support of the application for admission become UMKC property and will not be returned to students, nor will UMKC release copies of such credentials to a third party.

The graduate degree programs at UMKC have varying schedules for receiving, reviewing and acting on applications for admission. Before applying, applicants should contact the principal graduate adviser or graduate officer for the chosen degree to determine program-specific deadlines. Lists of the names of the current graduate officers and principal graduate advisers are available, on request, from the School of Graduate Studies.

International graduate applicants should refer to International Graduate Student Applicant and Student Information later in this section.

Graduate Academic Regulations

The minimum academic regulations and degree requirements for graduate study at UMKC, as outlined in the subsections that follow, have been determined by the UMKC graduate faculty through representation on the Graduate Council and the Committee of Graduate Officers, and apply to all graduate programs. Individual schools and departments may adopt additional and more stringent requirements for admission, retention and degrees that take priority over these minimum regulations. These additional requirements are detailed under the various fields of study in this catalog.

Academic Loads

Full-Time Academic Load Definition for Graduate Students without Assistantship Appointments

Graduate students enrolled in 9 or more credits during a regular semester or 5 credits during a summer session are considered full-time students. All students registered for fewer than those specified totals are classified as part-time students, unless they hold a teaching or research appointment at UMKC. This designation of full time is for academic purposes only and does not apply to assessment of fees or degree program residency requirements.

Full-Time Academic Loads for Graduate Teaching and Graduate Research Assistants (GTAs/GRAs)

Full-time enrollment for students holding graduate teaching assistant or graduate research assistant appointments is 6 hours in a regular semester or 3 hours in a summer session. GTAs/GRAs are expected to make normal progress toward their degrees and should enroll in a minimum of 6 hours per semester (3 credits in the summer session). However, GTA/GRA appointees who have completed all required coursework for the degree and who are working full time on research need only enroll for the minimum of 3 credits. Note that this policy in no way alters the residency requirements and criteria for doctoral degrees. Further, international students holding GTA/GRA appointments also must abide by requirements of the U.S. Immigration Service and should consult the international student adviser before reducing their course loads.

Special Cases: Requests for GTA/GRA Appointments Greater than Half Time and Requests for Exemption from Social Security Withholding for GTAs/GRAs

GTA/GRA appointments are normally restricted to no more than 20 hours per week (.5 full-time employee). Requests for GTA/GRA appointments greater than .5 FTE must be submitted to the School of Graduate Studies prior to the beginning of the appointment and must be accompanied by a statement from the student's major adviser that the additional work load will neither place the student at risk academically nor impede the student's academic progress.

Graduate students holding GTA/GRA appointments are automatically exempt from Social Security withholding tax as long as they are enrolled in at least 6 credit hours. If the student's enrollment falls below 6 credit hours, the student's academic unit may certify his or her eligibility for continued exemption for one of the following two reasons: (1) the GRA is a doctoral student working in a research laboratory as a component of the educational requirement and is enrolled in the minimum number of research hours required for doctoral students who have passed comprehensive examinations; or (2) the GTA or GRA is a graduate student enrolled in fewer than 6 credit hours because it is the student's exit semester.

Certification forms are available in the School of Graduate Studies office. The form requires signatures from the student's major adviser and the principal graduate adviser of the student's academic unit. After these individuals have signed the form, it must be sent to the School of Graduate Studies for recommendation. The School of Graduate Studies forwards the completed request to the Payroll Office for final action on the request.

Restricted Academic Loads

Limitation on the size of the academic load for which graduate students can register might be imposed by the dean or faculty adviser. Generally, students on probation are required to restrict the academic program to a minimum full-time load until they have returned to good standing.

Interpretation of Full-Time and Half-Time Status of Graduate Students for Purposes of Certification to Lending/Funding Agencies

To be eligible for certification of *full-time status* as a graduate student by the Registrar's Office, a student must meet at least one of the following conditions:

- Enrollment in 9 credit hours;
- Half-time (.5 FTE) GTA or GRA appointment and enrollment in 6 or more hours;
- Quarter-time (.25 FTE) GTA or GRA appointment and enrollment in 7 hours;
- Ph.D. and D.M.A. candidates who have passed their

doctoral comprehensive examinations and are enrolled in 1 hour (not to exceed six semesters of certification under this category).

To be eligible for certification of *half-time status* as a graduate student by the Registrar's Office, a student must meet at least one of the following conditions:

- Enrollment in 5 credit hours;
- Half-time (.5 FTE) GTA or GRA appointment and enrollment in 3 credit hours;
- Quarter-time (.25 FTE) GTA or GRA appointment and enrollment in 5 credit hours.

Special Cases and Limitations on Registrar's Certification to Lending/Funding Agencies:

- Ph.D. or D.M.A. students who have not taken and passed their doctoral comprehensive examinations and who do not meet one of the other enrollment qualifications for certification and Master's/Educational-Specialist students not qualifying for certification under one of the categories listed above may petition the principal graduate adviser in their academic unit for special consideration. If, based on a review of the student's petition, the principal graduate adviser believes there is sufficient reason for certifying the student for full-time or half-time status, the principal graduate adviser may submit a request to the Registrar's Office;
- Work to satisfy an incomplete grade or grades from a previous term or terms does not multiply the credit hours from the work. Therefore, a class may be used only in status calculation for one term. Since the hours are used in status calculation during the original term of enrollment, that is the only term that the hours may be counted;
- Status may not be calculated nor certified for future terms.

Enrollment

Changes of Enrollment

Information given in this section reflects minimum campus standards for graduate students' changes of enrollment. Because each academic unit has the prerogative to set more stringent rules, students should consult the principal graduate adviser or graduate officer in their major area of study for unit or discipline-specific rules. All changes in enrollment by graduate students must be initiated in the office of the principal graduate adviser (Arts and Sciences) or graduate officer of the respective unit and completed in the Registration Office.

Additions:

Students who want to enroll in an additional course may do so during the first week of the term provided they have the approval of the faculty adviser. Course additions or late enrollments after the first week of the term generally are not allowed.

Withdrawals:

Graduate students may withdraw from a course at any time prior to the first day of the final examination period, provided the permission of the faculty adviser has been obtained and notification to the instructor has been made. However, after the mid-term, students will be academically assessed. If failing at the time of withdrawal, students will be graded "WF" (withdrawn failing). [*Note: Individual academic units may have earlier deadlines for withdrawal.*]

Change from Audit to Credit:

Graduate students may change status in a course from audit to credit during the first week of the term, provided they have the approval of the faculty adviser and have notified the course instructor.

Change from Credit to Audit:

Graduate students may change status in a course from credit to audit any time prior to the final examination period, provided they have the consent of the course instructor and the approval of the faculty adviser. [Note: Individual academic units may have earlier deadlines and may have program-specific restrictions on re-taking audited courses for credit.]

Withdrawal for Financial Delinquency:

If students fail to fulfill financial obligations with the University after adequate notice, withdrawal from all courses during that term will result.

Enrollment/Readmission Policy

Until the time they have completed all coursework on their approved programs of study, graduate students in good standing who have not enrolled for only one semester may re-enroll without applying for readmission. Students who attend other schools in the interim must submit transcripts of such work from each institution attended. Graduate students are considered inactive after a lapse of two or more regular semesters of enrollment. Subsequently, inactive graduate students who want to continue must follow the same admission procedures as those required for new applicants. After a lapse of three or more terms, graduate students will re-enter under requirements in effect at the time of readmission.

Continuous Graduate Enrollment Requirement

After completing all courses included in the planned programs or plans of study for degrees, all degree-seeking graduate students must remain continuously enrolled in each regular semester up to and including the semester in which their degrees are awarded. This requirement applies also to the summer term for students whose degrees are being awarded at the end of a summer term. This continuous enrollment must be for a minimum of one-hour credit in research and thesis, research and dissertation, or other work designated by the department or school. When no suitable credit registration is available, or when students have previously enrolled in at least the minimum number of 599 (thesis) or 699 (dissertation) or equivalent credits required on their programs or plans of study, students may fulfill the continuous enrollment requirement by registration in continuous graduate enrollment (899) for zero credit hours. Interruption of continuous registration due to failure to comply with this requirement will result in the need for readmission under requirements then in effect. Academic units may require retroactive enrollment as a condition of readmission.

Continuous Graduate Enrollment (899):

Courses designated as 899, Continuous Graduate Enrollment, are charged at the rate established for one credit hour. Registration, by mail or in person, must be completed by the end of the first week of a regular semester or of a summer session. Students may obtain a reference number for 899 from the Registration and Records office.

Enrollment Classifications

Post-Baccalaureate, Non-Graduate Student Classification: Students who have earned a baccalaureate degree and who are seeking only additional undergraduate courses may be admitted under a post-baccalaureate (code 4-E) classification. Students in this classification are restricted to enrollment in courses numbered 499 and below and may not take any courses for graduate credit. Courses taken while classified as a code 4-E student may not be included for credit on a graduate degree program at a later date. Code 4-E students wanting to be reclassified as graduate students for a future term must reapply and be regularly admitted to the graduate programs in which they want to seek advanced degrees.

Degree-Seeking and Non-Degree-Seeking Graduate Student Classifications:

Students admitted to any of the graduate classifications (whether degree seeking or non-degree seeking) will be enrolled automatically for graduate credit in courses numbered 300 to 499 unless they indicate on their enrollment forms that they do not want graduate credit for the course or the instructor specifies the course may only be taken for undergraduate credit. Courses numbered 299 and below may not be taken for graduate credit, are not calculated in a student's graduate grade-point average and cannot be included as credit courses on a graduate student's program of study.

The following six admissions categories are used for degree-seeking graduate students at UMKC:

- 1. *Regular Master's Degree Seeking (Code 6)* Degree-seeking graduate students admitted to a master's degree program without reservation.
- Conditional Master's Degree Seeking (Code 6-V). Degree-seeking graduate students admitted to a master's-level degree program who have not yet fulfilled all admissions requirements specified by the academic unit responsible for the degree program.
- 3. *Regular Educational-Specialist Degree Seeking (Code* 7). Degree-seeking graduate students admitted to an Educational-Specialist degree program in the School of Education without reservation.
- 4. Conditional Educational-Specialist Degree Seeking -(Code 7-V). Degree-seeking graduate students admitted to an Educational-Specialist degree program who have not yet fulfilled all admissions requirements specified by the School of Education.
- Regular Doctoral Degree Seeking (Code 8). Degree-seeking graduate students admitted to a doctoral degree program (Ph.D. or D.M.A.) without reservation.
- Conditional Doctoral Degree Seeking (Code 8-V). Degree-seeking graduate students admitted to a Ph.D. or D.M.A. program who have not yet fulfilled all admission requirements specified by the academic unit responsible for the degree program.

Full admission of code 6-V, 7-V and 8-V students to a degree program and appropriate reclassification are subject to students' removal of deficiencies and approval of satisfactory performance.

Admission to graduate study and to a particular degree program is no guarantee that students will be advanced to candidacy or granted a higher degree. All candidates are expected to perform at a consistently high level and to satisfy all the requirements for the degree. The final determination, as to whether or not students will be recommended for a graduate degree, is made by the graduate faculty in the fields concerned. The graduate faculty reserves the right to deal with exceptional cases on individual merit.

Degree-seeking graduate students who plan to change their field of study must reapply for admission and be regularly admitted to the desired graduate program in the new department or school.

The following three admission categories are used for non-degree-seeking graduate students:

1. Non-Regular Graduate - Continuing Education, Non-Degree-Seeking Student - (Code 6-H). Students taking courses for graduate credit through the Division of Continuing Education. It should be noted that admission to this category (generally through self-certification) does not constitute regular admission to a graduate program at UMKC. However, on the recommendation of the adviser and approval by the graduate officer, a limited number of graduate credit courses (normally no more than 6 credit hours) may be applied to individual degree programs after students have been regularly admitted to do graduate study (see Application for Graduate Study, above).

- 2. Visiting Graduate Student (Code 6-C). This includes students who have been properly certified as graduate students at an accredited institution other than UMKC, and have permission to enroll in specific courses (including 500-level courses) at UMKC. Note: Students who have previously been enrolled in a UMKC graduate program must have been in good academic standing at the end of their last UMKC graduate enrollment to take graduate courses as a visiting graduate student.
- 3. *Graduate Special Non-Degree Seeking (Code 6-G).* This classification is used for two categories of students: (1) Community access, non-degree-seeking students wanting access to graduate level courses not available through continuing education; and (2) Potential graduate applicants, not meeting requirements for conditional admission and wanting to take graduate-level courses in order to qualify for admission. The following restrictions apply to 6-G Classification graduate students:
 - Students apply to the academic unit, if declared. If undeclared, students are admitted as undeclared graduate students in the College of Arts and Sciences;
 - All graduate academic regulations apply;
 - Students must have a baccalaureate degree prior to admission;
 - Students are subject to the campus graduate academic probation and ineligibility policies;
 - Students with a 6-G classification are not eligible for financial aid;
 - International students may not be issued I-20 forms for admission under a 6-G classification;
 - International students considered under the 6-G classification must meet the University standards for evidence of English proficiency;
 - Students admitted under this classification must reapply to the academic unit and be admitted to a graduate degree program in order to be changed to degree-seeking status;
 - At the discretion of a department or area, the graduate-level courses completed with a grade of B (3.0) or better while classified as a 6-G student may be applied toward a graduate degree in that department or area. Of the courses listed on a degree, no more than 12 semester credit hours may have been completed while enrolled as a 6-G student.

All non-degree-seeking graduate students (6-C, 6-G, and 6-H) wishing to enter a degree program must reapply for and be regularly admitted to the department or school from which they want to receive an advanced degree.

Exceptions to Academic Regulations

Campuswide Exceptions

Petitions for an exception to a campuswide graduate academic regulation must originate with the student. It must be processed through the graduate officer and dean or program director in charge of the student's graduate degree program and forwarded to the dean of the School of Graduate Studies. Only the dean, or the designated representative, are authorized to grant an exception to the graduate academic regulations applying to all graduate students. Petitions must be in writing and include (1) the reason for requesting the exception and a detailed justification from the student; (2) recommendation for action by the appropriate graduate officer; (3) recommendation for action by the department or division chair (if applicable); and (4) recommendation for action by the appropriate dean or program director. The graduate dean or designated representative will review the petition and related documentation and render a decision which will be communicated in writing to the academic dean or director, the graduate officer, the student and the registrar.

Program-Specific Exceptions

Petitions for exception to a program-specific academic regulation are handled within the academic unit's degree program. A graduate student who has petitioned for an exception to a program-specific academic regulation and whose petition has been denied may appeal the decision to the dean of the School of Graduate Studies if all other remedies open to the appellant have been exhausted at the department and college, school or program level. Appeal to the dean of the School of Graduate Studies must be made in writing within 14 consecutive days from the date the student received the written notice of the petition decision. The dean of the School of Graduate Studies will investigate the case and take appropriate action in a timely manner. The decision of the graduate dean, as the chancellor's designated representative, is final and will be communicated in writing to the student, the graduate officer, the academic dean or director and the registrar.

Graduate Courses and Grading Policies

Course Designations

In general, courses numbered 500 and above are open only to regularly admitted graduate and Ph.D. students.

Courses numbered 300 to 499 are upper division juniorand senior-level courses. Graduate students who enroll in such courses have the option of designating them, at the time of enrollment, as being "not for graduate credit." If the student chooses this option, the grade will not be included in the student's graduate grade-point average and the course may not be included on the graduate or Ph.D. program/plan of study and will not count toward a graduate degree. In order for a 300- or 400-level course to be accepted for graduate credit, students will be expected to do supplementary work (additional reading, projects, papers and contact hours with the instructor) and to demonstrate graduate-level competency and achievement in the subject. Also, students must take the course for graduate credit and complete it with a grade of B- (2.7) or better. The total number of acceptable 300- to 400-level courses to be applied to requirements for a graduate degree may not exceed 40 percent of the total number of courses applied to graduate or non-interdisciplinary doctoral-degree requirements, or one-third of the total number of courses on the approved Interdisciplinary Ph.D. plan of study.

Courses at the 100- and 200-level are not available for graduate credit and will not be applied toward the number of hours required for a graduate degree.

Courses numbered 580 to 589 generally are reserved for seminars, workshops and special topics. Consult individual degree programs for possible restrictions on such offerings. The course numbers 590 to 598 usually are reserved for non-thesis research, directed studies and readings. Courses numbered 599 are restricted to research leading to a thesis. Considering this numbering system, no more than 40 percent of courses numbered 590 to 599, or other courses which fall in the categories listed above for that course number range, may be applied to a graduate degree program of study, with the exception of I.Ph.D. study.

Courses numbered 695 to 699 are restricted to research leading to a dissertation. Continuous Graduate Enrollment is

numbered 899. **Note:** The numbering of graduate courses in the School of Dentistry differs from the system described above.

Course Restrictions

Policy on Admission of Undergraduates to Graduate-Level Courses:

In addition to regularly admitted graduate students, seniors who meet the requirements below, and who have obtained the necessary approvals and received permission from the School of Graduate Studies, may enroll in a limited number of courses numbered in the 500 series and above, or may enroll in appropriate 300- and 400-level courses for graduate credit.

Minimum requirements:

- Seniors within 12 credits of graduation who have a 3.0 GPA or better in their college work; or
- Seniors within 30 credits of graduation who have a 3.5 GPA in their college work.

To request permission to take a graduate-level course, the senior must:

- 1. Obtain a request to take graduate-level course form and an advising transcript from the Registrar's Office. (Forms also are available on-line at www.umkc.edu/sgs.)
- 2. Fill out the request to take graduate-level course form, attach a copy of the advising transcript to the form and seek written approval on the form from the course instructor; the dean or director of the academic unit in which the requested course is offered; and the student's undergraduate adviser.
- 3. Once the above steps have been completed, submit the form to the School of Graduate Studies for final approval. This last step should occur no later than four weeks before regular registration.

This policy does not apply to 500-level courses in the Bloch School of Business and Public Administration open exclusively to graduate students. However, Bloch School seniors may begin work on the master of science in accounting degree if pre-approved by the Division of Accountancy based on their formal application to the master of science in accounting program.

This procedure is intended to allow a degree of flexibility in planning the academic programs of degree-seeking seniors who clearly have shown academic merit and plan to pursue advanced study after graduation. This option is not available for post-baccalaureate students (code 4-E).

In all cases, eligible students may enroll in no more than 6 credits of graduate-level courses or courses for graduate credit through this procedure. In addition, first-semester seniors who enroll in graduate-level courses are limited to a total enrollment of no more than 15 hours for the semester. Graduate-level courses (500 and above) are to be selected from those courses generally offered to first-semester or first-year graduate students. Courses such as special topics, individual studies and directed research designed for advanced graduate students are not eligible under these provisions.

Students may petition that the courses can be taken for graduate credit or undergraduate credit. Credit may be applied to requirements for a graduate or a bachelor's degree, but not both.

Requests by students who meet all the requirements stated above will be approved by the dean of the School of Graduate Studies or designated representative. In exceptional cases, students who do not meet the requirements stated above may present a petition to the dean of the School of Graduate Studies. Such petitions must be presented to the school no later than four weeks before the beginning of the term for which enrollment is sought.

Students who do not meet the above criteria but who register for a graduate-level course will be withdrawn administratively from the course. Fees paid for the course will be refunded.

Graduate-Credit, Continuing-Education Courses:

Graduate-credit courses are offered on an irregular basis at both off-campus and on-campus locations through the Division of Continuing Education, in conjunction with the various instructional divisions.

Students may enroll in such courses and earn graduate credit without being regularly admitted to a graduate program. However, application of such credits toward an advanced degree can be determined only after students have been regularly admitted to graduate study. Such application depends upon the acceptance of students and the course by the respective department or division offering the degree. Students are responsible for determining whether these credits will satisfy the requirements of their particular educational goals and should make such determination before registering for the course.

Grading System

The following is the grading and grade-point system at UMKC:

Letter Grade	Description	Points per Semester Hour
А	The highest grade	4.0
A-	5 5	3.7
B+		3.3
В	Work of distinction	3.0
B-		2.7
C+		2.3
С	Average work	2.0
C-		1.7
D+		1.3
D	Passing, but	1.0
	unsatisfactory	
D-		0.7
F	Failure without	0.0
	credit	
NR	Not Reported	0.0
WF	Withdrew failing	0.0
W	Withdrew; no	-
	academic assessment	
I	Incomplete	-
AT	Audit	-
CR	Credit only	-
NC	No Credit	-
P	Passing	-
S	Satisfactory	-

In terms prior to and including 1985, any of the above grades might be preceded by an R indicating a repeated course. These grades are not included in either total hours or the grade-point average. (Examples: RC, RD, RF.) Since 1985, all grades, including those in repeated courses, are included in the GPA calculation. For the 1993 Fall Semester, UMKC began using the plus/minus grading system for grades A, B, C, and D. The grade of A+ is valid only for students in the School of Law.

Incomplete Grades

An instructor may give a grade of incomplete (I) to students who have been unable to complete the work of the course because of illness or other valid reasons beyond their control. Students who receive an incomplete must complete the required work within one calendar year to avoid an F (failure without credit). The instructor may specify a shorter completion period. A grade of incomplete is only appropriate when enough work in the course has been completed that the student can finish the remaining work without re-enrolling in the course in question, or by attending additional classes. In other instances, students should withdraw. Students cannot re-enroll in a course for which an incomplete remains on the record.

This policy is exclusive of those courses which are considered directed individual studies; internships; special topics; practicums; research and thesis; and research and dissertation courses. Because completion of such courses will quite often span several terms, incomplete grades assigned in such courses will not automatically lapse to an "F" grade after one calendar year, but will adhere to the completion period specified by the instructor.

Policy on Repeated Graduate-Credit Courses

Whenever students repeat a graduate-credit course, they must submit a course repeat form to the Registration and Records Office no later than the fourth week of the term. Students seeking graduate degrees are limited to repeating no more than 20 percent of the credits applicable toward a graduate degree. If approved by the school or department or Interdisciplinary Ph.D. supervisory committee, students may repeat a course once to improve the grade-point average or satisfy the program requirements. The second grade received will be used to calculate the grade-point average that will be used in satisfying degree requirements.

Requirements for Retention

Graduate Probation Policy

Graduate students, regardless of classification, must maintain a 3.0 (B) grade-point average in all coursework taken for graduate credit at UMKC and must meet any additional academic requirements imposed by the school, department or Interdisciplinary Ph.D. discipline. Students are responsible for keeping apprised of their academic status by referring to term grades and their permanent academic record on file in the UMKC Registration and Records Office.

Whenever the cumulative GPA for UMKC courses taken for graduate credit by a graduate student of any classification falls below 3.0, the student's status for the next term becomes: "On Probation - See principal graduate adviser." (Interdisciplinary Ph.D. students will be directed to consult their interim adviser or research adviser.) The principal graduate adviser, interim adviser or research adviser will review the student's progress and provide counsel, and the following conditions apply:

- A graduate student on probation who is not restored to good academic standing by the end of two successive regular semesters following the term in which the cumulative GPA fell below 3.0 will be declared ineligible to re-enroll.
- While on probation, a graduate student must achieve a 3.0 term GPA in order to enroll for the following term.
- A graduate student on probation will not be restored to good standing until a cumulative graduate-credit GPA of at least 3.0 is achieved.

Ineligibility for Further Graduate Study

Ineligibility following academic probation In the case of ineligibility following academic probation, the graduate student may present a petition for re-enrollment to the principal graduate adviser of the student's academic program. Petitions will be reviewed by the graduate faculty member responsible for the student's degree program. That faculty member will make a written recommendation to the appropriate administrative levels within that academic unit approving or denying of the petition. The approval or denial action may include:

- Approval for further graduate study in the student's current field of study and in the same classification but on a restricted probation basis (as defined in written contract);
- Approval for further graduate study in the student's current field of study in a different student classification and on a restricted basis;
- Denial for further graduate study in the student's current field but approval for undergraduate study only;
- Denial for further study, either graduate or undergraduate, in the student's current field of study.

Ineligibility due to unsatisfactory progress or performance When a department or school or Interdisciplinary Ph.D. supervisory committee, irrespective of a student's grade-point average, considers a graduate student's performance to be unsatisfactory, that department, school or committee may recommend to the dean or director of the academic unit in which the student's degree is housed that the student be reclassified or declared ineligible for further study. The dean or director reviews the recommendation and conveys a decision to the respective faculty group and to the registrar, who then notifies the student of the action.

Students who have been declared ineligible due to unsatisfactory progress or performance may appeal such decisions to the dean of the School of Graduate Studies, as designee of the chancellor. This appeal must be made in writing within 14 consecutive days after receipt of the registrar's notification to the student of the decision. The dean of the School of Graduate Studies will review the full record of the case and the appeal document.

The decision of the graduate dean, as the chancellor's designated representative in such cases, is final and will be communicated in writing to the student; the graduate faculty review group(s); the academic dean or director; and the registrar.

Requirements for Graduation

Program of Study

Graduate education is intended to answer the personal needs of students and the special needs of society not satisfied through undergraduate training. Graduate degrees indicate that the holders have sufficiently mastered a program in a particular field to pursue creative projects in that specialty. The degrees are awarded for completion of a coherent program – formalized as the program or plan of study – designed to assure the mastery of specified knowledge and skills. Forms for specifying individual programs or plans of study are available from the principal graduate adviser (Arts and Sciences) or graduate officer of the academic unit.

Students may elect to fulfill either the degree requirements in effect at the time of their original admission (provided there has not been a lapse in attendance at UMKC of more than two consecutive terms) or the degree requirements in effect at the time of advisement into a planned graduate program of study.

No course at the 300- or 400-level taken on a credit/no credit basis; no 300- or 400-level course with a grade below B-(2.7); and no 500-level or higher course with a grade below C (2.0), will count toward any advanced degree program. Additionally, 80 percent of the credits for the degree must be passed with a grade of B (3.0) or better. Students admitted to the combined J.D./M.B.A. program must receive grades of B or better in 80 percent of Bloch School courses. Because of different grading standards,the transferred law hours are not included in the 80 percent calculation. Degree programs may have requirements which are more stringent. If so, the program requirement takes precedence over the campus minimums.

Thesis and Dissertation Preparation and Approval Process

Formatting regulations:

Some master's degree programs have a thesis requirement and some have a thesis option. All Ph.D. degree programs at UMKC require a dissertation. The School of Graduate Studies, guided by the Graduate Officers Committee, establishes the format regulations for theses and dissertations (T/Ds) at UMKC. Degree candidates are responsible for familiarizing themselves with and adhering to the standards of the latest edition of the "Manual for Writers of Term Papers, Theses and Dissertations," edited by Kate Turabian. They also must become familiar with the special format regulations for title page; abstract format and length; approval page; order of manuscript sections; paper; page numbering; heading levels; margins; and type style and size; which are outlined in the "University of Missouri-Kansas City Guide to Formatting Theses and Dissertations," which is available on-line at UMKC.edu/sgs/. Bibliographic references must follow Turabian guidelines unless the student's academic program has an alternate bibliographic reference format approved by, and on file with, the School of Graduate Studies. Candidates should check with the principal graduate adviser in their respective academic units to determine the approved bibliographic reference format standard for their degree programs. Any variances from the standards outlined in the "University of Missouri-Kansas City Guide to Formatting Theses and Dissertations," Turabian and discipline-approved bibliographic reference styles must be requested in writing and approved in advance by the dean of the School of Graduate Studies. A copy of the dean's official letter authorizing exceptions to formatting standards must be included as an appendix to the T/D.

The School of Graduate Studies provides formatting workshops at the beginning of each fall and winter semester. In addition, degree candidates may schedule individual conferences with the school's T/D Formatting Specialist during the first four weeks of the fall or winter semester and the first two weeks of the summer term to make sure they have interpreted the formatting guidelines correctly and to seek guidance on specialized formatting problems. Candidates should call the School of Graduate Studies office, (816) 235-1161, for time and place of workshops or to schedule a formatting conference.

Supervisory committee review and approval of T/Ds: Approval of the T/D begins with the degree candidate's supervisory committee. Candidates work closely with their research advisers while writing the various sections of the manuscript. The candidate's supervisory committee shall ensure that the scholarly content and style of the T/D is in keeping with recognized standards of the chosen discipline(s). Graduate degree candidates should periodically provide all members of their supervisory committee with preliminary drafts of the T/D for review and comment. Final drafts of the T/D, which incorporate all substantive revisions supervisory committee members have previously requested, should be submitted to all members of the candidate's supervisory committee at least eight weeks before the expected date of graduation. At this time, all supervisory committee members notify the supervisory committee chair of their preliminary approval of the T/D.

For both master's and doctoral-level degree candidates, when the supervisory committee members feel the work is complete and ready for final defense by the candidate, the other committee members notify the supervisory committee chair. The chair then signs a preliminary approval form which the candidate must submit, along with a letter-quality copy of the T/D, to the School of Graduate Studies for certification of acceptance by the graduate dean. Each member of the candidate's supervisory committee must fill out and forward either a Master's Thesis Reader's Report form or a Doctoral Dissertation Reader's Report form, as appropriate, to the candidate's supervisory committee chair. These signed readers' report forms must either accompany the review copy of the thesis or dissertation or be forwarded under separate cover by the supervisory committee chair before the graduate dean will review the thesis or dissertation for certification of acceptance. Preliminary approval forms, Master's Thesis Readers' Report forms and Dissertation Readers' Report forms are available from the School of Graduate Studies office in the Administrative Center (5115 Oak Street) and on-line at umkc.edu/sgs/forms.

School of Graduate Studies review and certification of acceptance of T/Ds:

The deadline for submitting the T/D to the School of Graduate Studies for certification of acceptance is printed in the calendar section of the schedule of classes for each term. The actual date varies, but it is approximately six weeks before the end of the Fall or Winter semesters and four weeks before the end of the Summer Session. Prior to the published deadline for the term in which the degree candidates expect to graduate, they must present the following to the School of Graduate Studies office:

- One unbound copy of the T/D in final form, but not printed on archival quality, acid-free paper;
- The signed Preliminary Approval of T/D by Supervisory Committee form;
- A completed Readers' Report from each member of the candidate's supervisory committee.

T/Ds normally will not be accepted for review for graduation during the current term unless they are received in the School of Graduate Studies by the published deadline. In the school, the T/D is reviewed by a Thesis/Dissertation Formatting Assistant for conformity to the campus formatting standards and by the graduate dean for quality of content. The school's review process generally takes from two to four weeks. If the T/D has significant formatting problems, it will be returned to the candidate without further review or certification. The candidate will be required to make all necessary formatting corrections and resubmit the T/D to the School of Graduate Studies. If this happens, the candidate's graduation may be delayed. Enrollment in an additional term of continuous-graduate enrollment may be required.

When both components of the School of Graduate Studies review of the T/D are complete, the candidate is notified by phone. If format corrections are required, the School of Graduate Studies will hold the certificate of acceptance until appropriate revisions are made and rechecked by the formatting assistant. The candidate then picks up the certified copy of the T/D and the certificate of acceptance from the School of Graduate Studies office and may schedule the final defense of the work. (See Final Thesis Examination and Supervisory Committee Approval under Master's Degrees Academic Regulations and Final Dissertation Examination under Doctoral Degree Programs (Ed.D., Ph.D., D.M.A.) later in this section.) Candidates who are out of the city must make arrangements to have the certified copy picked up locally or returned, collect, by messenger service. Candidates should print a copy of the approval page from the T/D on archival quality, acid-free paper meeting the requirements specified in the formatting guide, and take it to their T/D defense, and the supervisory committee members should sign the approval page in black ink. A copy of the approval page with the original signatures must be included in at least one copy of the T/D that is deposited in the libraries. The remainder of the manuscript

should not be printed on the archival quality, acid-free paper until after the defense because the supervisory committee members may suggest final corrections or changes during the defense itself.

Deposit of T/Ds with Library:

After the candidate formally defends the T/D before their supervisory committee, the committee members sign the approval page of the T/D. The candidate then makes any final revisions requested by committee members at the defense and prints two copies on archival quality, acid-free paper, as specified in the formatting guide. The final step in the process is deposit of these two, unbound copies of the T/D with the appropriate UMKC library. Theses and dissertations must be published on microfilm through ProQuest Information and Learning University Microfilms International (UMI) Dissertation Information Service. There is a fee for microfilming. As an added optional service, UMI will handle the copyrighting process for theses and dissertations, if desired. The libraries require payment for both the required and optional UMI fees, in the form of a cashier's check or money order made out to UMI, at the time of deposit. Candidates should check with the Reference Librarian to confirm the current amount of these fees. Deposit must be accomplished no later than the Friday immediately preceding the first day of classes for the next term.

Application for Graduation

Completing degree requirements does not automatically result in conferral of the degree. Students must request that the University review their academic record and certify that degree requirements have been met. To make this request, students must file applications for graduation with the registrar no later than the end of the fourth week of the semester in which the degrees will be completed. Students graduating at the end of the summer session must file an application for graduation no later than the end of the second week of the summer session. An approved program/plan of study must be on file with the registrar at the time the student makes application to graduate. Filing applications for graduation initiates degree checks in the Registrar's Office. The students and their advisers receive a degree checklist which indicates any deficiencies the students must clear. Students should contact their advisers if there are questions about the checklist. The application for graduation also places candidates' names in the commencement program. In addition, when completion of degree requirements have been certified by the registrar, the Registrar's Office authorizes the diploma order.

Specific term deadlines for all graduate requirements are announced in the schedule of classes for each term. Students are responsible for being aware of and meeting these deadlines.

The registrar will certify degree completion if students' academic records (transcripts) show that they have completed all of the requirements listed on the approved program/plan of study.

Commencement

Advanced degree candidates are urged to attend commencement. Students should arrange for rental or purchase of a cap and gown at the University Bookstore at least six weeks before the graduation date.

Time Limit on Degree Credit for Master's and Educational-Specialist Degrees

Credit over seven years old at the time of graduation, which is included on the master's or educational-specialist program of study and has not been applied to a previous degree, may not be counted toward the fulfillment of a graduate degree program unless validated to the satisfaction of the department or school and the School of Graduate Studies. Petitions and affidavits for this purpose may be obtained from the School of Graduate Studies. A maximum of 30 percent of the student's program of study may be validated under this procedure.

In connection with an authorized leave of absence, an exception to the time limitation may be approved in advance.

Master's Degrees Academic Regulations

The following general campus regulations pertain specifically to the master's degree. Master's students also should refer to Graduate Academic Regulations earlier in this catalog section for regulations common to all graduate degrees at UMKC and to specific degree program requirements in other sections of this catalog.

Adviser/Supervisory Committee

Upon admission to a graduate program, a student seeking a master's degree will contact the appropriate department chairman of the College of Arts and Sciences or the graduate officer of the professional school or program. This person will assign the student an adviser who is a member of the graduate faculty. When research and a thesis are degree requirements or the student has selected a thesis option, the Arts and Sciences department chair or the school's graduate officer will appoint two additional faculty members to serve on the graduate student's supervisory committee. The chair and a majority of the members of a master's student supervisory committee must be full members of the graduate faculty.

Qualifying Examination

If required, a qualifying examination must be passed before a master's program is filed with the graduate officer. The department or school will notify students of the time and date of the examination. The results of the qualifying examination will be reported to the registrar. With the approval of the adviser and the supervisory committee, if such exists, students may take the qualifying examination a second time.

Master's Degree Program of Study

In consultation with the adviser or the supervisory committee, the master's student plans a program of study in accordance with the minimum requirements listed here and the specific degree requirements listed elsewhere in this catalog. Forms for specifying individual programs of study are available from the principal graduate adviser or graduate officer of each academic unit. Students should file this program of study with the departmental principal graduate adviser (College of Arts and Sciences) or the graduate officer in their academic units before 60 percent of the coursework applicable to the degree is completed. In the College of Arts and Sciences, the principal graduate adviser secures required departmental approval and forwards the program of study to the graduate officer of the college.

After the proposed program has been approved, as required by the academic unit, the unit's graduate officer will distribute copies of the program of study to the registrar, the student's adviser or chair of the student's supervisory committee, the principal graduate adviser (Arts and Sciences) and the student.

The approved master's degree program of study must include a minimum of 30 graduate credits. No more than 40 percent of the credits on the program may be 300- and 400-level courses. At least 60 percent of the credits must be at the 500 level or higher. Further, up to 6 credits may be allowed for Research and Thesis (599). Other demonstrations of skills considered by the department or school as comparable to the thesis may be accepted. No more than 40 percent of the courses applied toward a master's degree program of study may be in the non-thesis research, directed studies, readings or research and thesis categories. Such courses normally fall in the 500 to 599 range, but the numerical designations may vary among academic units.

Program changes:

Subsequent changes in the program of study must be approved by the student's adviser, the supervisory committee and the appropriate dean or department chair. The graduate officer will inform the registrar of such changes. If cumulative changes in courses or degree requirements exceed four, a new program of study should be filed.

Dual Degree Programs at the Master's Level

Dual-degree programs allow students to simultaneously pursue degrees at the master's level in two fields of study. Students must complete at least 80 percent (rounded up) of the credit hours required for each degree separately. Students must satisfy admission, course and examination requirements of both degree programs.

Transfer Credit Policy for Master's Degrees

A maximum of 20 percent of the graduate credit hours appearing on the program of study (rounded up) may be transferred from a recognized graduate school for a master's degree at UMKC. Such transfer credits must meet with approval of the student's supervisory committee and appropriate principal graduate adviser (College of Arts and Sciences) or graduate officer and be in accordance with all of the following criteria:

- 1. The coursework must be:
 - Offered by an accredited school;
 - Applied toward a graduate degree at the host institution and taken for graduate credit;
 - Approved by the appropriate graduate faculty.
- 2. A grade of B (3.0) or higher for 300- and 400-level courses and C (2.0) or higher for 500-level courses or other courses restricted to graduate students only must have been earned. (CR or P will be accepted on receipt of a statement from the institution where credit was received of letter grade equivalent meeting grade standards as stated above.)

Transfer credit may be allowed for correspondence courses, provided the credits meet the criteria outlined in 1 and 2 above. Transfer credit will not be accepted for research and thesis/dissertation hours (defined by UMKC), travel experience or work/life experience. Foreign university transfer credit must meet the above criteria as attested by the registrar.

A majority of the coursework applicable to any graduate degree at UMKC must be completed at UMKC. UM traveling scholar credits are not considered transfer credits. However, the sum total of credits from other UM campuses, and other transfer credits (not more than 20 percent of the total credits) cannot exceed 14 credits on a 30-credit master's degree program, or a proportional equivalent (approximately 46 percent) on programs exceeding 30 credits; and must be within the limits stated above.

A student who has been awarded a master's degree at UMKC or another regionally accredited graduate school may petition the faculty to apply up to 6 hours of graduate credit earned on the first degree toward meeting the requirements of a second master's degree. Credit, so approved, not from UMKC will be subject to all preceding transfer credit criteria.

See the sections on specific degree programs for requirements pertaining to transfer credit for educational-specialist and doctoral degrees.

After approval of the program of study, graduate credit may be earned at another institution only with prior approval of the dean of the School of Graduate Studies. Forms to request such approval are available from the Registration and Records Office. A current catalog of the institution where the course is to be taken or an official catalog description of each course must be attached to the request form. The official transcript for such work must be forwarded to the Registration Office upon completion of the course.

Final Master's Competency Examination

The final master's competency examination, if required, will be written, oral or both, at the discretion of the school or department, and will be passed no later than three weeks prior to the anticipated date of graduation. Students will submit a request for the examination to the adviser no less than two weeks before the examination is to be taken. The candidate's supervisory committee chair will report the results of the final competency examination in writing to the candidate and to the principal graduate adviser (Arts and Sciences) or graduate officer, who will then inform the registrar.

Thesis Preparation and Approval

For regulations pertaining to thesis preparation and approval, the reader is directed to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this section.

Final Thesis Examination and Supervisory Committee Approval

The format and procedures of the final examination in defense of the thesis are determined by the supervisory committee and its chair. This examination may be conducted only after the thesis has been certified for acceptance by the dean of the School of Graduate Studies, and may not be administered when UMKC is not officially in session. The defense of the thesis is approved when a majority of the supervisory committee members recommend approval and sign the Report of the Result of Final Master's Thesis Examination form and the committee approval page in the thesis.

Within 48 hours of the defense, the supervisory committee chair shall report the results of the final thesis examination in writing to the candidate and to the departmental principal graduate adviser (Arts and Sciences) or graduate officer, who then informs the registrar.

Deposit of Approved Thesis with Libraries

For regulations pertaining to deposit of approved thesis with libraries, refer to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this section.

Doctoral Degree Programs (Ed.D., Ph.D., D.M.A.)

The Ed.D., Ph.D., and D.M.A. degree programs at UMKC have the following elements in common:

- Appointment of supervisory committees;
- Approval of doctoral programs or plans of study;
- Satisfaction of a doctoral residency requirement;
- Satisfactory completion of a doctoral comprehensive examination in order to advance to candidacy.

In addition, all Ph.D. programs and the Ed.D. program have the following elements in common:

- A work of original research or scholarship reported in dissertation form;
- Formal defense of the candidate's dissertation.

The specific requirements for satisfying these common elements may vary from program to program. Doctoral students are also subject to most of the minimum general graduate academic regulations and degree requirements listed in previous portions of this catalog section. The following general regulations are minimum requirements. Each degree program may have regulations that are more stringent and would take precedence over the minimums stated previously. Refer also to graduate regulations described in previous sections that are common to all graduate or doctoral students and to degree requirements listed under the academic unit sections of this catalog.

Supervisory Committee

At the request of the non-interdisciplinary Ph.D. student, the D.M.A. student or the Ed.D. student, and upon the recommendation of the student's adviser, the graduate officer for the degree program will appoint a supervisory committee consisting of at least three members of the graduate faculty, including the student's adviser. While the chair of the initial supervisory committee can be a member of the graduate faculty, once the student has reached the dissertation stage, the committee must be chaired by a member of the University of Missouri doctoral faculty.

Non-interdisciplinary Ph.D. and D.M.A. student dissertation committees must have at least five members and Ed.D. student dissertation committees must have at least four members. The majority of the members of the non-interdisciplinary Ph.D., Ed.D. and D.M.A. dissertation committees must be doctoral faculty or regular graduate faculty members. All five members of Interdisciplinary Ph.D. student supervisory and dissertation committees must hold doctoral faculty status. See the I.Ph.D. academic regulations section for additional specifications for I,Ph.D. Supervisory Committees.

Qualifying Examination

The qualifying examination, if required, will be given before the doctoral program of study is filed with the graduate officer. At the discretion of the school or department and the supervisory committee, a master's degree from UMKC in the area of intended specialization may be considered as a substitute for the qualifying examination. Students must submit a request to take the qualifying examination to the appropriate department chair in the College of Arts and Sciences or the dean of that professional school. The results of the qualifying examination will be reported to the graduate officer, who will inform the student and the registrar. With approval of the adviser and supervisory committee, students may take the qualifying examination a second time.

Doctoral Programs of Study

Students should plan their programs of study in consultation with their advisers and supervisory committees. Forms for specifying individual programs of study are available from the principal graduate adviser or graduate officer of each academic unit. It is recommended that students file this program of study with the graduate officer in their academic units before 60 percent of the coursework applicable to the degree is completed. (Interdisciplinary Ph.D. students must file their proposed plans of study and form their supervisory committees within 12 months of being fully admitted.) No more than 40 percent of the program may be 300- and 400-level courses. After the proposed program has been approved, as required by the academic unit, the unit's graduate officer will distribute copies of the program of study to the registrar, the adviser and the student.

Subsequent changes in the program of study must be approved by the student's adviser, supervisory committee, the dean or department chairperson of the school in whose area the specialization is offered and the graduate officer, who also will inform the registrar of such changes. If cumulative changes in courses and degree requirements exceed four, a revised program of study should be filed.

Transfer Credit

Graduate credit earned before entering a UMKC doctoral program may be applied to the doctoral degree if it is of acceptable quality and appropriate to the student's program of study as determined by the student's academic unit or supervisory committee. The total amount of graduate credit earned before admission to a UMKC doctoral program and applied to the doctoral degree cannot exceed half the number of credit hours, exclusive of dissertation research credits, required for the degree. All graduate coursework, completed prior to admission and not used to earn the master's degree or educational-specialist degree, must be no more than seven years old at the time the doctoral program of study is approved.

After admission to the doctoral program, if a student wishes to take graduate coursework at another institution and apply it to his or her doctoral program, the student must receive written approval from the doctoral program's graduate officer or from the student's supervisory committee chair, as appropriate, before the coursework is taken. Such coursework is not considered as transfer credit. Upon completion of the coursework, the student must have the official transcript forwarded to the UMKC registrar.

Residency Requirements

Interdisciplinary Ph.D. Students:

Interdisciplinary Ph.D. students entering the program after the Fall 2000 semester must satisfy the doctoral residency requirement by satisfactory completion of at least 21 credits, exclusive of dissertation research, in no more than 18 months. When satisfying the residency requirement, all I.Ph.D. students are subject to the following restrictions:

- 1. The doctoral residency requirement must be satisfied no later than the end of the semester in which the student completes his or her comprehensive examinations.
- 2. Students must achieve a cumulative graduate grade-point average of at least 3.0 in all courses counted toward satisfying the residency requirement.
- 3. Dissertation research credits (696 to 699) may not be counted toward satisfying the doctoral residency requirement

I.Ph.D. students who entered the program prior to the Winter Semester 2001 may choose to use the preceding residency requirement guidelines or the following guidelines that were in effect prior to that term: Three consecutive semesters (Fall-Winter-Fall or Winter-Fall-Winter) or three consecutive terms including one Summer Session (a Fall and Winter semester plus one adjacent summer session) of full-time enrollment after full admission to the program. In general, 9 hours in a Fall or Winter semester or 5 hours in a Summer Session is considered full-time enrollment for graduate students. Following are several exceptions to this general rule:

- For purposes of fulfilling the Ph.D. residency requirement, 6 hours enrollment in the Fall or Winter and 3 hours enrollment in the Summer will be considered full-time enrollment for a Ph.D. student with at least a .25 FTE GTA/GRA appointment.
- For purposes of fulfilling the Ph.D. residency requirement, 6 hours enrollment in the fall or winter and 3 hours enrollment in the summer will e considered full-time enrollment for Ph.D. students who are UMKC employees, with academic appointments of at least .5 FTE.
- The credit-hour requirement to be classified as a full-time student and to satisfy the Ph.D. residency requirement for students who hold full-time teaching appointments at regionally accredited four-year institutions of higher education will be the same as for students holding a GTA/GRA appointment at UMKC.

Non-Interdisciplinary Ph.D. and Ed.D. Students:

The residency requirement for the Ed.D. student or non-interdisciplinary Ph.D. may be satisfied using the same guidelines stipulated for Interdisciplinary Ph.D. students, or in any one of the following alternate ways:

- 1. Two consecutive semesters of 12 credits each term of resident coursework at UMKC following the completion of at least 24 credits of graduate study.
- 2. Three terms of 8 credits each term of resident coursework at UMKC, to be completed within 18 months and following the completion of at least 24 credits of graduate study.
- 3. Two consecutive semesters of 9 credits each term of resident coursework at UMKC while employed at least half time for the University in teaching or research and following the completion of at least 24 credits of graduate study.

D.M.A. Students:

The residency requirement for the D.M.A. may be satisfied in any one of the following ways:

- 1. Two consecutive semesters with a minimum of 9 credits each.
- 2. One semester with a minimum of 9 credits and two summer sessions with a minimum of 5 credits each, provided that the full-time semester is adjacent to one of the summer sessions. It is expected that the summer sessions be consecutive.
- 3. Completion of 24 credits within 18 consecutive months.

Comprehensive Examination

To advance to degree candidacy, doctoral students are required to pass a comprehensive examination. D.M.A. students selecting a non-dissertation option may satisfy the comprehensive examination requirement during their final semester. For all other doctoral students, the comprehensive examination must be successfully completed at least seven months before the date of graduation:

- For graduation in May: Nov. 1;
- For graduation in July: Dec. 1;
- For graduation in December: May 1.

The following requirements must have been met before students can take the comprehensive examination(s):

- 1. Assignment of a supervisory committee;
- 2. Successful completion of the qualifying examination, if required;
- Filing and approval of the program of study and completion of essentially all coursework required for the degree;
- 4. If required by the academic unit, satisfactory demonstration of foreign language proficiency through accepted coursework or other evidence specified by the student's supervisory committee;
- 5. Completion of residency in most cases.

The comprehensive examination may be written, oral or both. Through their advisers, students will apply to the graduate officer in their academic unit for an examining committee to be composed of a minimum of five members of the graduate faculty. This committee shall consist of members of students' supervisory committees and such others as the graduate officer may select.

The examination will be arranged and supervised by the adviser. It will generally terminate within one month after it starts. Upon satisfactory completion of the examination, the student's adviser sends a report of the results of the examination, with the signatures of all members of the examining committee, to the graduate officer, who, in turn, informs the student and the registrar.

A student is considered to have passed the comprehensive examination if all, or all but one member, of the examining committee vote that the candidate passes. If failure is reported, the examining committee will either recommend termination of status as a doctoral student or suggest additional work or other remedial measures. Furthermore, a student who has failed may not take a second examination for at least 12 weeks. Failure of a second comprehensive examination shall automatically preclude candidacy at this institution.

Program Time Constraints

The doctoral student must take and pass the doctoral comprehensive examination and advance to candidacy within five years from the beginning of doctoral coursework (within four years if entering with a master's degree in the same or closely related field). After the establishment of degree candidacy, a maximum of five years will be allowed for completion of degree requirements. Failure to complete the work within the periods specified will necessitate re-evaluation of the entire program and may result in a notice of termination. In compelling circumstances and on the written recommendation of a majority of the student's supervisory committee members, the dean of the School of Graduate Studies may grant a one-year extension. Some academic units may impose more stringent time requirements.

Required Enrollment

See Continuous Graduate Enrollment Requirement, included in the Graduate Academic Regulations part of this section.

Dissertation and Completion of Degree

Doctoral Dissertation Requirement

All UMKC Ph.D. degrees and the Ed.D. degree require a dissertation as the final component of the program. The dissertation is also a requirement in some D.M.A. programs and an option in others. The doctoral faculty view the dissertation as one of the most important aspects of the student's experience because:

- It is a work of original research or scholarship that makes a contribution to existing knowledge;
- It is an educational experience that demonstrates the candidate's mastery of research methods and tools of the specialized fields;
- It demonstrates the candidate's ability to address a major intellectual problem.

For regulations pertaining to formatting the dissertation and the process for approval, the reader is directed to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this catalog section.

Final Dissertation Examination

Final examinations in defense of the dissertation are open to all members of the doctoral faculty, who may attend as interested observers. The format and procedures of the defense are determined by the supervisory committee and its chair. The date, time and location must be announced and published at least two weeks before each final examination takes place. This examination may be conducted only after the dissertation has been approved by the dean of the School of Graduate Studies, and may not be administered when UMKC is not officially in session.

The defense of the dissertation is approved when a majority of the supervisory committee recommend approval and sign the Report of the Result of Final Doctoral Examination form. Within 48 hours of the defense, the supervisory committee chair will report the results of the final dissertation examination in writing to the candidate. For non-interdisciplinary doctoral candidates, the supervisory committee chair also will report the results of the defense to the principal graduate adviser (Arts and Sciences) or graduate officer. The departmental principal graduate adviser (Arts and Sciences) or graduate officer, in turn, informs the registrar.

Deposit of Approved Dissertation with Libraries

For regulations pertaining to deposit of the approved dissertation with the libraries, please refer to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this catalog section.

International Graduate Applicant and Student Information

General Graduate Admission Policies

Minimum Admission Requirements

Graduates of schools outside the U.S. may be considered for admission to a graduate degree program at UMKC, subject to the following criteria.

- 1. They must have completed a course of study at least the equivalent of a U.S. baccalaureate degree;
- 2. They must have above-average grades in previous college study;
- 3. They are required to establish proof of adequate English proficiency as part of the UMKC admissions process. Applicants from countries in which English might be one of the official languages, but is not necessarily the first language of the majority of the population, must attain a minimum composite score of 550/CBT 213 on the Test of English as a Foreign Language* (TOEFL) to be considered for admission. The results of this examination must be received in the UMKC International Student Affairs Office before the application deadline. Exceptions to this policy:
 - Non-native speakers who hold degrees or diplomas from post-secondary institutions in English-speaking countries (such as the United States, Antigua, Australia, Bahamas, Barbuda, Belize, Canada,Dominica, Fiji, Gambia, Ghana, Guyana, Ireland, Jamaica, Liberia, Mauritius, New Zealand, Sierra Leone, Solomon Islands, South Africa, St. Christopher (St. Kitts), St. Lucia, St. Vincent, Tobago, Trinidad, Uganda, United Kingdom [England, Scotland, Wales and Northern Ireland], Zambia and Zimbabwe), provided they have spent a minimum of two years in successful full-time study there and English was the medium of instruction.
 - International transfer students from other institutions in the United States or Canada who have spent a minimum of two years in successful full-time study.
- 4. In addition to 1 through 3 above, international graduate students must satisfy any program-specific admission criteria. For instance, the Graduate Management Admission Test (GMAT) is required for applicants for graduate study toward the M.B.A. degree. Several programs require TOEFL scores that are well above the minimum stated previously. The Graduate Record Examination (GRE), including the appropriate Advanced Test, is either required or strongly recommended for all other international graduate applicants. International students planning to apply are directed to consult the appropriate degree program listing for additional criteria and medical requirements.

* In the United States, the Educational Testing Service, Princeton, NJ 08541, U.S.A., can be contacted for application forms to take this test. TOEFL applications for the International Testing Program are handled by a number of agents. Detailed information can be obtained from U.S. embassies, consulates general, bi-national centers and other offices throughout the world.

Deadline for Application for Admission

As noted in the general section on graduate admissions, the graduate degree programs at UMKC have varying schedules for receiving, reviewing and acting on applications for admission. Applicants are directed to the program listings elsewhere in this catalog. This institution reserves the right to consider applicants for the most appropriate term. Generally, international students applying from overseas will be considered for admission to the fall semester only.

Required Academic Records for International Applicants Applicants must provide complete and official certificates, in

English, of all degrees, diplomas, mark sheets, grade reports and examination records. Secondary school records must be submitted in all cases in addition to the college/university transcripts or credentials.

International Applicant and Student Financial Statement International students must present evidence of sufficient finances to cover their university and personal expenses while they are attending UMKC. A prescribed financial statement must be completed and returned with their other application materials. UMKC will not assume any financial responsibility for international students. Students seeking admission to the

graduate level after an undergraduate program must submit a new financial support statement.

Additional Information and Application Forms

International applicants to graduate programs who want more information and forms to apply for admission can go to http://www.umkc.edu/isao or write:

International Student Affairs

University of Missouri-Kansas City 5100 Rockhill Road Kansas City, MO 64110-2499, U.S.A.

Forms to apply for graduate admission can also be downloaded from one of the following Web sites:

- Application forms for admission to master's degree programs, the doctor of musical arts programs, the Ph.D.in psychology, and the Ph.D. in counseling psychology: http://www.umkc.edu/application;
- Application forms for admission to the Interdisciplinary Ph.D. program: http://www.umkc.edu/iphd.

Special Institutional Regulations for International Graduate Students

In addition to the minimum graduate academic regulations and degree requirements common to all graduate students or specific to their particular degree programs, international graduate students at UMKC are subject to the following special requirements and regulations:

Registration with Student Adviser

Admitted international students must clear their attendance and register at the office of the international student adviser prior to their first registration at UMKC. Once admitted, international graduate students must show satisfactory and regular progress toward their graduate degrees.

Health Insurance

International students are required to purchase UMKC mandatory, exclusive health insurance.

English Proficiency Requirements

Proficiency in written and spoken English is essential to international graduate students' success in their degree programs at UMKC. To ensure that all international graduate students either already have, or have an opportunity to acquire, these necessary skills at a level appropriate to their degree program, the Graduate Officers Committee supports the following guidelines:

- Current minimum TOEFL scores for entering students and graduate teaching assistants should be strictly adhered to by all academic units without exception;
- Prior to their first enrollment in classes at UMKC, newly admitted international graduate students must take the English Evaluation Examination conducted by the UMKC Applied Language Institute (ALI) unless they are exempted from this requirement by virtue of having achieved a TOEFL score of at least 600/CBT 250;
- Based on results of the English Evaluation Examination scores, such students must enroll in and successfully complete the applied language courses indicated as necessary by the student's academic unit in consultation with the UMKC Applied Language Institute;
- Prospective international graduate students should be aware that required coursework in English as a second language may add extra time to their individual graduate programs of study;
- The only international graduate students exempted from this policy are the following:
 - Native English speakers from English-speaking countries such as Canada, England, the Republic of Ireland, Australia and New Zealand;
 - Non-native English speakers who hold degrees or diplomas from post-secondary institutions in English-speaking countries (such as the United States, Canada, England, the Republic of Ireland, Australia and New Zealand) provided that they have spent a minimum of two years of successful full-time study and English was the medium of instruction.

Policy on Award of Teaching Assistantships

In 1986, the Missouri State Legislature and the University of Missouri Board of Curators adopted a policy which seeks to guarantee effective, high quality instruction for undergraduates. The state has mandated, and the Board of Curators fully supports the ruling, that graduate students who did not receive both their primary and secondary education in a nation or territory in which English is the primary language may not hold a teaching appointment during their first term of enrollment at any public institution of higher education in the state of Missouri. In addition, all such students shall be tested for their ability to communicate orally in English in a classroom setting and shall be given a cultural orientation to prepare them for teaching prior to being given an appointment.

At UMKC, the following standards are in effect for international students who wish to be considered for graduate teaching assistant (GTA) appointments:

- They must have been enrolled at UMKC at least one term prior to receiving a GTA appointment;
- They must have attained a minimum official TOEFL score of 550/cbt 213;
- They must take the SPEAK (Speaking Proficiency English Assessment Kit) test and receive a score of 50 or higher. This test is offered once, at no charge, through UMKC's Applied Language Institute (ALI) to international graduate students who have attained the required minimal TOEFL score of 550/cbt 213;

- They must participate in the cultural orientation program provided by the School of Graduate Studies. The orientation covers policies and procedures pertaining to teaching and grading; a profile of UMKC's student body; an introduction to degrees offered at UMKC; an overview of the U.S. system of higher education, and teaching strategies and techniques. The orientation program is held over several days during the week prior to the beginning of classes for the fall semester;
- Early in the fall semester, they must present a simulated 8-10 minute lecture or laboratory demonstration that will be videotaped for review and approval of their verbal communication skills by the dean or director of the programs in which they will have a GTA appointment and by the School of Graduate Studies.

International Graduate Teaching Assistant (IGTA) Certification:

An international graduate student must have satisfied each of the above standards in order to be certified to accept a GTA appointment. International graduate students interested in being considered for appointment as teaching assistants may make arrangements for the required SPEAK test through the ALI office which is located at 5301 Rockhill Road. To schedule SPEAK tests, students may call (816) 235-**1233**. This phone has a voice message box; students should leave a name and phone number if no one is present to take their call.

For information on dates, or to register for the next Cultural Orientation series, contact the School of Graduate Studies (816) 235-1161.

If students do not make the required minimum score on the first taking of the SPEAK test, or if their videotaped simulated lecture is not approved, they must enroll in English 100-E Special Studies in Culture Research and Pedagogy for IGTAs. This one-credit hour course is offered during the last eight weeks of each fall term. If students do not make the required minimum score on the SPEAK test when it is re-administered during English 100-E, they must then enroll in the three-credit hour course, English 100-F SS: Academic English/International Grad Teaching Assistants & Applicants in a subsequent semester.

Exceptions to any of these IGTA certification standards must be authorized by the Dean of the School of Graduate Studies. Departments wishing to request an exception for a student must submit a written petition for exception to the Graduate Dean, including full justification supporting the request, prior to the beginning of the term for which the GTA appointment is sought.

Intercampus Graduate Study Opportunities

UM Traveling Scholar Program

This cooperative program is designed to provide breadth and depth in the opportunities for graduate study offered at the four campuses of the University of Missouri. Advanced graduate students are permitted to enroll on other UM campuses in courses that are not available on their home campus. Normally, enrollment at the host campus is limited to no more than two courses per semester. Only students in good standing who have been admitted to a graduate degree program on the home campus may participate.

Courses completed at the host campus must be applicable toward requirements for the degree sought by students at the home campus, either by way of transfer credit or as resident courses. Interested students should contact the School of Graduate Studies or their principal graduate adviser for additional information.

Cooperative Doctoral Degrees

Through the UM cooperative doctoral program, graduate faculty members, who hold membership in the doctoral faculty of the University of Missouri, are eligible to serve as directors of doctoral dissertations on their resident campus, as well as on any of the other three campuses offering a doctoral degree in the doctoral-faculty member's academic field. Students who want to pursue doctoral-degree programs in conjunction with one of the other three campuses of the University of Missouri may do so in accordance with the guidelines listed below. The registrars at UMC, UMR, or UMSL can provide information on admission procedures for the doctoral programs on their respective campuses. The cooperative program is particularly appropriate for students seeking a doctoral degree that is not offered at the campus where they currently are enrolled. Direct specific inquiries regarding participation by doctoral faculty on the UMKC campus to the dean or chairperson of the UMKC academic unit offering a graduate program in the desired field of study.

In the following guidelines, the terms primary campus, graduate school or dean refer to that granting the degree.

- Students must be accepted by the department or area granting the degree and must comply with all the rules of the primary graduate school and discipline/area regulations;
- The dissertation adviser must be a member of the doctoral faculty of the University;
- Advisory/supervisory committees, comprehensive committees and oral committees, as required, will be appointed by the primary graduate dean in consultation with the graduate dean on the participating campus, drawing on faculty on both the cooperating and primary campus:
 - 1. The makeup of each committee normally will be recommended by the major adviser with the approval of the appropriate director of graduate studies/department chair/divisional dean as per normal campus procedures;
 - 2. In cases where students are on a cooperating campus:
 - (a) The adviser/supervisory committee chair may or may not be on the same campus. If that person is on the cooperating campus, at least three of the five members of the committee will be from the primary campus;
 - (b) Students must complete the residency requirement on the primary campus. Exceptions to this ruling must be justified fully with emphasis on quality and cost considerations and must have the approval of the primary graduate dean.
- Selection of the cooperating departments and preparation of a program must be completed at the earliest possible moment and communicated via the primary graduate dean to the participants involved. Both graduate deans will maintain program files relative to students. Respective graduate deans are responsible for the quality of that portion of the cooperative program that is performed on their campus and under the jurisdiction of their faculty;
- Reporting of the degree shall be the responsibility of the primary campus. The cooperating campus shall be given credit in terms of student credit hours and/or dissertation credits for the work completed on that campus and shall provide suitable recognition of dissertation advisers and the committee members.

Potential Sources of Financial Support for Graduate Study

Graduate Teaching and Research Assistantships

Financial support for graduate students is most frequently provided through the academic unit in which the student is enrolled. This support may be in the form of a Graduate Teaching Assistantship (GTA), a Graduate Research Assistantship (GRA) or a named fellowship. The stipend amounts and number of awards vary from unit to unit. Students interested in consideration for such support should contact the principal graduate adviser or graduate officer in the respective unit for information on application procedures and deadlines.

Each semester, students who hold GTA or GRA appointments also may be recommended by their academic units for chancellor's GTA/GRA fee remission awards. These awards cover the basic graduate educational fee for 6 credit hours.

For students who are not residents of Missouri, an additional benefit of having a GTA or GRA appointment is that it qualifies them for a chancellor's non-resident fee remission. A minimum FTE of 25 percent (a full-time equivalent of 100 percent is 40 hours) is required to be eligible for this award.

Federally Supported Sources of Financial Aid

Graduate students who are U.S. citizens or permanent residents and who are enrolled at least half-time, with financial need demonstrated via the FFS analysis, may be considered for aid through the College Work Study Program. They also may apply for a Perkins Loan (formerly NDSL) or a Guaranteed Student Loan. Additional information on these programs is available from the UMKC Financial Aid and Scholarships Office, 116 Administrative Center, 5115 Oak St., Kansas City, MO 64110-2499, (816) 235-**1154**. Staff members are available for information, inquiries and assistance with applications from 8 a.m. to 5 p.m. weekdays.

Institutionally Supported Fellowship and Award Competitions

The School of Graduate Studies administers a number of annual competitions for graduate fellowships. Fellowship stipends vary from \$600 to \$15,000. Some include remission of portions of the graduate education fees and all include remission of non-resident fees, if applicable. Detailed information and application forms are available from the School of Graduate Studies office. Applications normally are due in the early spring (February and March) for fellowships to be awarded for the following academic year. Application deadlines, eligibility and selection criteria, and PDF versions of the application forms are posted on the School of Graduate Studies Web site: http://www.umkc.edu/sgs.

Fee Information

Information about fees is only for the school year 2004-05. Educational fees are governed by the University of Missouri Board of Curators; therefore, new educational fee schedules cannot be provided until approved by the Board of Curators.

Although the University expressly reserves the right to change any and all fees and other charges at any time without advance notice, UMKC provides current fee information, when approved by the UM Board of Curators, as soon as possible in the online version of the General Catalog

(http://www.umkc.edu/catalog), as well as in each term's class schedule/registration guide. These guides are available from the Registrar's Office in the Administrative Center, 5115 Oak St., during the registration period for that term.

Fees for coursework vary with the number of hours of enrollment; the student's undergraduate, graduate or professional school status; the term of enrollment; and the applicability of any special fees.

Student Program/Use Fees

For 2004-05, the Student Program User Fee will be \$12.98 for up to 12 credit hours per semester. This fee has four components:

- The Student Activity Fee is \$4.01 per credit hour and funds student clubs and organizations as well as a variety of student activities and services.
- The Intercollegiate Athletic Fee is \$2.85 per credit hour and provides support for the UMKC's men's and women's intercollegiate athletic programs.
- The Physical Facilities Fee is \$0.61 per credit hour and funds student-related facilities repair and renovation.
- The University Center Fee is \$5.51 per credit hour and supports the remodeling and repair of the University Center, as well as day to day operating costs.

The fee for the Associated Students for the University of Missouri will be 15 cents per credit hour for up to 10 credit hours per semester or up to six credit hours in the summer. Further, an Information Technology Fee of \$10.60 per credit hour will be assessed.

All students enrolled in an on-campus course will be designated a student fee of \$30 for Fall Semester, \$30 for Winter Semester and \$15 for Summer Session for the multipurpose recreation facility. All students enrolled in an on-campus course will be designated a student fee starting Fall 2003 of \$85.00 for the Fall Semester, \$85.00 for the Winter Semester and \$40.00 for the Summer Session for the new Student Center project. It is pledged to retire the revenue bonds that will be issued to fund construction costs.

A student health fee of \$2.22 per credit hour will be assessed. This fee funds the student health and wellness service. For more information about health services for students, please see Counseling, Health and Testing Center, which appears in the Division of Student Affairs section of this catalog.

Non-Resident Tuition Scholarships

Non-resident students who take a part-time credit load of six hours or less during a 16-week term, or three hours or less during an eight-week term, may be eligible to receive a tuition scholarship to offset the non-resident portion of their educational fees. This tuition scholarship is not available to non-resident students taking more than six hours during a 16-week term or more than three hours during an eight-week term. Dropping classes from full-time to six or fewer hours during a 16-week term, or three or fewer hours during an eight-week term, does not make the student eligible for the part-time tuition scholarship. Non-resident students who had a Missouri income tax liability may be eligible for the Missouri Taxpayers Tuition Scholarship. Application forms and further information can be obtained from the UMKC Cashier's Office, which is located in the Administrative Center, 5115 Oak, Room 112.

Students who have F-1 or J-1 visas are not eligible for either of the above scholarships.

Non-Resident Educational Fees

Students not residing in Missouri are considered non-residents and pay fees according to the non-resident fee schedule. Information concerning change of residency status may be found in the Residence and Educational Fee Rules.

A copy of this booklet may be obtained from the UMKC Admissions Office in the Administrative Center, 5115 Oak, Room 120.

To have a copy of this booklet mailed to you, send your request to UMKC Admissions Office, 120 Administrative Center, 5100 Rockhill Road, Kansas City, MO 64110-2499.

Metro Rate

The Metro Rate is a program benefiting undergraduate, non-professional students who are legal residents of Johnson, Leavenworth, Miami or Wyandotte counties in Kansas. These students will be assessed educational fees equivalent to those of a Missouri resident (the "in-state" rate). Questions about the Metro Rate may be directed to the Office of Admissions. The phone number is 816-235-1111. More information about this program is at http://www.umkc.edu/admissions and http://www.umkc.edu/metrorate.

Partial Hours

Fractional credit hours shall be assessed at the next higher full-hour rate.

Other

For any sessions other than those specified, or for any fee that cannot be calculated on a per-credit-hour basis, the session fee or per-credit-hour fee shall be prorated.

Audited Courses

Courses taken for audit and courses taken for reduced credit will be assessed according to their normal credit value. Students enrolling in a non-credit course are required to pay fees according to the equivalent credit of the course.

Payment of Fees

UMKC offers a minimum payment plan (Optional Minimum Payment Plan) to pay educational fees. The number of payments allowed depends on the date of registration. The plan is similar to the credit-card payment concept. The amount billed must be paid when due. Additional amounts paid do not affect the need to pay the next billed amount.

There is a finance charge of one percent per month on any unpaid balance. Failure to make required payments on a timely basis could result in withdrawal from classes.

All University fees must be paid in full by the deadlines specified in the current term's Schedule of Classes. Exceptions may be allowed when prior arrangements are made to bill an employer or government agency.

Please refer to the student course catalog applicable for the registered term to find payment dates and options.

Late Payment Fee

Effective with the Winter/Spring Semester of 2004, student accounts will be subject to a late fee of \$10.00 when payment is not received by the scheduled due date as communicated on the students Monthly Billing Statement. If the Minimum Payment or Billed Balance Due is paid on or before the scheduled due date, no late fees will apply.

Use of Credit Cards

MasterCard, VISA and Discover charge cards may be used to pay fees. Credit-card payments will not be accepted by telephone, but may be faxed. Students planning to use one of these methods should be aware that no charge will be made against the card without prior approval. This means all charges will be cleared by phone. The time it takes to get approval by phone may result in a possible delay in the student's registration process.

Advance Deposit on Student Fees

To reserve a position in the professional schools, a newly accepted student must make a deposit toward fees due. This payment will be credited to the student's educational fee account when enrollment in the program is complete. It is not transferable between professional schools. The deposit amounts are:

Dental Graduate Program	\$500
Dentistry Four-Year Program	\$200
Dentistry Six-Year Program	\$100
Schools of Medicine, Pharmacy and Law	\$100
Dental Hygiene	\$50

The advance deposit is a nonrefundable fee.

Late Registration Fee

Every student who completes registration after 8 a.m. on the first day of classes must pay a late fee. For 2004-05, the late fee will be \$35.

Service Charge for Returned Checks

There will be a service charge of \$25 for all returned checks.

If a check presented to the University for payment of student fees is returned unpaid after 8 a.m. on the first day of classes, the student issuing the check will be considered a late registrant and will be subject to late registration fees, as stated above.

Student Financial Responsibility

It is the responsibility of all students to promptly pay fees and other financial obligations to the University as they become due. The non-payment of any financial obligation may result (at the University's option) in withdrawal of the student from the University or denial of the student's readmission or continued enrollment. Such withdrawal does not relieve the student of the financial obligation. Collections will be pursued, including referral to collection agencies and credit bureaus. Outstanding financial obligations may prevent student records from being released.

Interstate Agreements with Kansas and Nebraska for Exchange of Students on Resident Fee Basis

By joint agreement of the Board of Curators of the University of Missouri and the boards of regents of the University of Nebraska and the University of Kansas, qualified students who would be eligible to pay only resident fees at the University of Missouri may enroll in certain programs in Kansas and Nebraska and be charged at the rate paid by students residing in those states. At the same time, qualified students who would be eligible to pay only resident fees in Kansas and Nebraska may enroll in certain programs on one of the campuses of the University of Missouri and be charged fees at the rate paid by Missouri residents.

Refund of Fees

Students leaving school or dropping courses for which they have paid fees will receive, subject to certain exceptions (such as the late registration fee), *a refund of fees* in accordance with the following schedule. Refunds are initiated through the Registration Office by presenting a petition for change of official program, signed by an authorized representative of the

dean's office, or by written request directly to the Registration Office. The postmark on the envelope of the withdrawal letter is used as the refund date.

A letter requesting cancellation of registration and full refund of fees must be postmarked not later than the day prior to the date UMKC coursework begins for that term.

Class Day of Cancellation, Withdrawal or Change of Course Load

16-Week Term	Refund	8-Week Term
Day 1	100%	Day 1
Days 2-8	90%	Days 2-4
Days 9-20	50%	Days 5-10
Days 21-40	25%	Days 11-20
After day 40	0%	After day 20

UMKC will adjust this schedule individually to meet federal regulations.

Class days are counted from the official first day of class, excluding Saturdays, Sundays and holidays.

All continuing education credit courses for the duration of the term are subject to this schedule.

Refunds are computed by the Cashier's Office prior to checks being drawn. Deductions may be made from the refund for any financial obligations due the University or federally funded financial aid that may require the return of the refund to the program from which it came. Decisions concerning refunds may be appealed, in writing. You may mail your appeal request to the Registrar's Office, 115 Administrative Center, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499.

You may bring your appeal request to the Registrar's Office, located in the Administrative Center, 5115 Oak.

Housing

The UMKC Department of Residential Life offers three housing options for its students, all conveniently located on the west side of campus near the University Center, Swinney Recreation Center, and within easy walking distance to all Volker campus buildings.

- The 339 bed Residence Hall located at 5030 Cherry offers a traditional-style hall with mandatory food plan.
- The new Oak Street Housing East hall will open fall of 2004 and features suite-style living for 561, also with a mandatory meal plan.
- Twin Oaks Apartments, located at 5000 and 5050 Oak, is a 585-unit twin-towered complex offering studios, one-two- and three-bedroom apartments.

Complete information about each of these facilities is available online at:

http://www.umkc.edu/housing.

Residence Hall Charges

Please refer to http://www.umkc.edu/housing/rates.asp for the complete lists of prices for the three residential facilities. For further information concerning housing at UMKC please contact:

UMKC Office of Residential Life 107 North Twin Oaks Building 5000 Oak Street Kansas City, MO 64112 (816) 235-**8840**

Our mailing address:

University of Missouri-Kansas City Residential Life 5100 Rockhill Road Kansas City, MO 64110-2499

Off-Campus Housing Service A housing service provides free information to UMKC students on available off-campus housing in the Kansas City area. The service is provided by the Welcome Center, located in the University Center at 50th and Holmes streets.

For more information:

(816) 235-8652 welcome@umkc.edu http://www.umkc.edu/welcome

Our mailing address:

University of Missouri-Kansas City Welcome Center 5100 Rockhill Road Kansas City, MO 64110-2499

Note: The University reserves the right to modify by increase or decrease the fees charged for attendance and other services at the University, including but not limited to educational fees, at any time when in the discretion of the governing board the same is in the best interest of the University, provided that no increases can or will be effective unless approved by the governing board not less than thirty (30) days prior to the beginning of the academic term (semester, etc.) to which the fees are applicable and such increase does not exceed ten (10) percent over the fee level existing immediately prior to the increase, with all modification of fees to be effective irrespective as to whether fees have or have not been paid by or on behalf of a student prior to the effective date of the modification.

Fall Semester 2004, Winter Semester 2005

	Educational Fee	Student(1) Programs User Fee	Info. Tech. Fee	Student Health Fee(2)	ASUM Fee(2)	Total Per Hour	Multi-(3) Purpose Bldg. Fee	Student Center Fee(3)	Maximum
Missouri Resident Fee Schedule							0		
Undergraduate (4) Graduate	\$209.20 \$254.30	\$12.98 \$12.98	\$10.60 \$10.60	\$2.22 \$2.22	\$0.15 \$0.15	\$235.15 \$280.25	\$30.00 \$30.00	\$85.00 \$85.00	
Law (J.D.) Law (LL.M.)	\$414.20 \$483.20	\$12.98 \$12.98	\$10.60 \$10.60	\$2.22 \$2.22	\$0.15 \$0.15	\$440.15 \$509.15	\$30.00 \$30.00	\$85.00 \$85.00	
Pharmacy, Pharm.D. Flat R							\$85.00	\$7,374.40	
Pharmacy, Graduate	\$348.40	\$12.98	\$10.60	\$2.22	\$0.15	\$374.35	\$30.00	\$85.00	_
Medicine (1-2) Medicine (3-6) Flat Rate	\$556.50	\$12.98	\$10.60	\$2.22	\$0.15	\$582.45	\$30.00	\$85.00 \$85.00	\$9,372.18 \$10,200.16
Dentistry, Graduate Dentistry (4) Flat Rate Dentistry (1-2) Flat Rate Dentistry (3-6) Flat Rate	\$775.30	\$12.98	\$10.60	\$2.22	\$0.15	\$801.25	\$30.00	\$85.00 \$85.00 \$85.00 \$85.00	\$11,301.50 \$10,554.90 \$7,610.90 \$10,554.90
Missouri Non-Resident Fee Schedule									
Undergraduate Graduate	\$524.10 \$656.70	\$12.98 \$12.98	\$10.60 \$10.60	\$2.22 \$2.22	\$0.15 \$0.15	\$550.05 \$682.65	\$30.00 \$30.00	\$85.00 \$85.00	
Law (J.D.) Law (LL.M.)	\$818.00 \$956.20	\$12.98 \$12.98	\$10.60 \$10.60	\$2.22 \$2.22	\$0.15 \$0.15	\$843.95 \$982.15	\$30.00 \$30.00	\$85.00 \$85.00	-
Pharmacy, Pharm.D. Flat R Pharmacy, Graduate	ate \$791.00	\$12.98	\$10.60	\$2.22	\$0.15	\$816.95	\$30.00	\$85.00 \$85.00	\$15,661.90
Medicine (1-2) Medicine (3-6) Flat Rate	\$1,126.20	\$12.98	\$10.60	\$2.22	\$0.15	\$1,152.15	\$30.00	\$85.00 \$85.00	\$18,487.38 \$19,691.50
Dentistry, Graduate Dentistry (4) Flat Rate Dentistry (1-2) Flat Rate Dentistry (3-6) Flat Rate	\$1,547.70	\$12.98	\$10.60	\$2.22	\$0.15	\$1,573.65	\$30.00	\$85.00 \$85.00 \$85.00 \$85.00	\$22,115.10 \$20,570.90 \$14,626.90 \$20,570.90

Other Fees

Late Registration Fee Registration Cancellation Fee Copyright	\$35.00 \$20.00 \$20.00
Applied Music Fee Clinical Nursing Fee	\$175.00 Per Semester \$140.60 Per Credit Hour
Undergraduate Computer Science Course Fee	\$22.50 Per Credit Hour
Undergraduate Engineering Course Fee	\$47.30 Per Credit Hour
Graduate Cluster Fees:	420.00 D C 11/11
Accountancy Business Administration	\$28.00 Per Credit Hour
	\$28.00 Per Credit Hour \$47.30 Per Credit Hour
Computer Science Engineering	\$47.30 Per Credit Hour

(1) Breakdown of Student Program User Fee (assessed on the first 12 hours): University Center Fee \$5.51; Athletic Fee \$2.85; Student Activity Fee \$4.01; Physical Facilities Fee \$0.61.

(2) Student health fees will be assessed on the first 12 hours per semester. ASUM (Associated Students of the University of Missouri) fees will be assessed on the first 10 hours per semester.

(3) Per semester.

(4) Includes residents of Wyandotte, Johnson, Leavenworth and Miami counties in Kansas. See "Metro Rate" in General Undergraduate Admissions Policies and Procedures earlier in this catalog.

College of Arts and Sciences

Administrative Offices Dean's Office, Scofield Hall 711 E. 51st Street (816) 235-**1136** Fax: (816) 235-**5191** college@umkc.edu http://www.umkc.edu/college

Mailing Address

University of Missouri-Kansas City College of Arts and Sciences 5100 Rockhill Road Kansas City, MO 64110-2499

Dean:

Bryan F. Le Beau Associate Deans: Joseph Hughey Judith K. McCormick Charles J. Wurrey

General Information

Statement of Purpose

The primary academic missions of the College of Arts and Sciences are teaching and research. Through these functions, the College serves the community, the state and society at large. The research and scholarship of the College's faculty not only expand the body of knowledge generally, but also enrich and enhance its teaching and instructional programs.

Graduate-level studies provide students with advanced instruction and/or independent research in the major field of study. Students pursuing master's-level work in a major field or a Ph.D. in Clinical Psychology are directed to the relevant department or program listing in the Arts and Sciences section of this catalog and to the General Graduate Academic Regulations and Information section of this catalog. Those planning other Ph.D.-level studies are directed to UMKC's Interdisciplinary Ph.D. program listing in the School of Graduate Studies section of the catalog.

Advising System

Faculty advisers in each department assist students in planning their academic programs and inform them about the degree requirements of the programs. Graduate students required to secure an adviser's approval before enrolling include majors in chemistry, English, geosciences, sociology and theatre. The Career Services Center provides workshops for students on decision making and career connections.

Arts and Sciences Courses

500 Interdisciplinary Colloquium On Aging (3). This course will introduce students to gerontology as a field of study and as a profession. The context for the emergence of the field is set in important demographic transitions of the 20th century. Identification and understanding of major issues and controversies in the field will help locate the contributions of a range of disciplines to aging studies. The connection of these issues with the development of social policies will be discussed.

500A Interdisciplinary Colloquium on Aging I (1-2).

500B Interdisciplinary Colloquium on Aging II (1-2).

500C Interdisciplinary Colloquium on Aging III (1-2).

- 500L Special Readings Topics/Philosophy (1-3).
- 500P Special Topics-Readings Psychology (1-3).

500Q Special Readings/Topics Theatre (1-3).

501 Special Readings/Topics (1-3). This is a designated arts and sciences course which gives all departments in the College the flexibility to offer, on demand and as the need arises, a graduate-level readings course in a particular area of specialization in any discipline in the College. The individual

departments determine the content of the course in any given semester in the same manner as any reading course, special topics, or independent study is presently handled. The departments are responsible for approving individuals or groups for the course and determine whether or not the course will be included as a part of a post-baccalaureate degree in their disciplines.

502 Introduction to African American Studies (3). This course provides an introduction to the contexts, theories, and methodologies that undergird African American studies. In addition to substantial time spent covering particular research skills and resources, students will also be introduced to African American culture and the issues related to African studies from several perspectives: history, literature, sociology, communication studies, and the like. Influences and perspectives from Africa, the Carribean, and South America will also be covered. The course will thus provide a broad background in African American culture and history, an introduction to the methodologies of several disciplines, and discussion of particular contemporary and historical issues such as slavery, segregation and integration, the Civil Rights Movement, Pan-Africanism, Afrocentrism, and current political debates.

505 Career Education and Transition in Special Education (3). This course is designed to increase awareness and knowledge about current disabilities legislation, vocational education, vocational rehabilitation, quality transition programs, school to work, self advocacy, workplace accommodations and comprehensive life skills learning. Prerequisites: EDSP 407 or equivalent. Offered: On Demand

509 Methods of Inq: Research Issues and Methods in the Liberal Arts (3). This seminar is required of all first semester participations in the Master of Arts in the Liberal Studies program. Must be taken concurrent with either A & S 510, 511, 512 or 513. This course serves as an introduction to various methods of inquiry and research in the humanities, social sciences, and sciences. Offered during four week-ends, the course is taught in conjunction with the week-day class offered that term (A & S 510 through 513). This course includes graduate level instruction in library research use of computer generated research tools and a strong emphasis on academic writing. Offered fall and winter semesters.

510 Method of Inquiry: An Interdisciplinary Study of the 1930s (3). This course is one of a series in the Master of Arts in Liberal Studies program which studies American culture, history, and science by examing major decades of the twentieth century. This seminar offers an in-depth study of America's Great Depression during the 1930s and how the problems of this country related to events across the globe. Readings, lectures, and discussions focus on historical, economic, political, and cultural issues in the face of national conflict. Sessions cover such topics as the emergence of Regionalist artists in the midwest, the contributions of Kansas City jazz to the creation of a new art form, African-American writers, the role of women in the Depression, economic causes of the Depression, the Pendergast Machine, and scientific developments between the two World Wars. Offered: every fourth semester or on demand.

511 Methods of Inquiry: An Interdisciplinary History of the 1940s (3). This course examines a decade, in this case the 1940s, from a variety of perspectives. The second world war stimulated profound changes in science, ethics, government, economics, social structures, and cultural constructions of race, class, and gender. In essence, this course will examine how American in the 1940s became increasingly "modern" and assesses the impact of those changes on the nation and the world.

512 Method of Inquiry: An Interdisciplinary History of the 1950s (3). This course examines a decade, in this case the 1950s, from a variety of perspectives. This course has three major themes: Domestic Politics, Foreign Relations and Scientific Development. Within these three major themes, a broad spectrum of human activity in the arts and sciences will examined.

513 Methods of Inquiry: An Interdisiplinary Study of the 1960s (3). As part of the Master of Arts in Liberal Studies series, this course examines a decade, in this case the 1960s, from a variety of perspectives. The Vietnam War stands as a turning point in the ways in which Americans, especially young Americans, viewed their country, the world, and, most importantly, themselves. This decade was crucial to the history of the civil rights movement, the women's liberation movement and American judicial process.

514 Critical Choices: Methods of Inquiry in Science (3). The course surveys current scientific developments and how these developments influence our society, whose citizens must make major policy decisions in areas with significant scientific content. Offered: On Demand

520 Critical Choices: Final Research Project and Capstone Seminar (3). This seminar is designed as a capstone experience for students in the last semester of their studies in the Master of Arts in Liberal Studies program. Working with three faculty members of the graduate faculty (one member each from the humanities, the social sciences, and the sciences), each student defines a final research project, spends the semester developing it, and presents his or her findings to the seminar at the conclusion of the course. Each project is intended to be thought-provoking and to be researched from an interdisciplinary point of view.

535 Directed Studies in Liberal Arts (1-3). Open to students in the Master of Arts in Liberal Studies Program, this course offers students the opportunity to pursue independent work at the graduate level on selected topics of an interdisiplinary nature, working with faculty members from at least two different departments. The course may not be repeated beyond a total of three credit hours. Permissions of the MALS Programs Director required.

540 Liberal Arts Thesis (1-3). Open to students in the Masters of Arts in Liberal Studies Program who wish to include a written thesis in their program of studies. The course may not be repeated beyond a total of three credit hours. Permission of the MALS Program Director required.

550 Seminar in Social Science Perspectives Study of Community (3).

571A Seminar in the Social Sciences (1-6). This is a designated Arts and Sciences course which gives all departments in the College the flexibility to offer, on demand and as the need arises, a graduate level seminar in a particular area of specialization in any discipline in the college. The individual departments determine the content of the course in any given term in the same manner as any seminar is currently handled. The departments are responsible for approving individuals or groups for the course and determine whether or not the course will be included as a part of post baccalaureate degree in their disciplines.

572 Seminar in Philosophy of Science I (3).

581 Practicum Seminar in Aging (3). This practicum experience is for students who already have substantial experience working in the aging services network. Students, faculty and service providers to the elderly from the community will discuss a work on solutions to practical problems and issues confronted in agencies serving the elderly. The student will complete a written project and related oral examination on a problem pertinent to his/her work experience.

591 Practicum in Community Social Science Research (3).

592 Field Practicum in Aging (3-8). Students spend 180-480 hours in a field placement with the supervision in a community agency or organization which services or advocated for older persons and keep a journal documenting and reflecting on the practicum activities and experiences, particularly as they related to gerontological theory and research. Students will study a particular subject revelant to their placement and describe this in a written project.

899 Required Graduate Enrollment (1).

Social Science Courses

610 Philosophy of Social Science (3). This course examines the development of the philosophy of science since the end of the 19th century. In this regard, Positivism, Conventionalism, and Realism as the three major conceptions of science will be studied and their significance as philosophical foundations of the social sciences will be assessed. Particular attention will be given to the emerging philosophy of science (i.e., Scientific Realism) which has profoundly challenged the more established Positivism.

620 Seminar in Social Theory and Policy Analysis (3). This seminar is designed to help the student develop, analyze, and evaluate objects of study. Considerable emphasis is placed on the integration of social theory and social policy. The course requires students to present a policy research project (or dissertation proposal) to the group. Each student is expected to give an oral and written evaluation of each proposal. Ideally, a member of the presenter's doctoral committee will participate in the class.

899 Required Graduate Enrollment (1).

Department of Art and Art History

204 Fine Arts Building 5015 Holmes Street (816) 235-**1501** art@umkc.edu http://www.umkc.edu/art

Mailing Address

University of Missouri-Kansas City Department of Art and Art History 204 Fine Arts Building 5100 Rockhill Road Kansas City, MO 64110-2499

Department Chair:

Burton L. Dunbar

Professors Emeriti:

Eric J. Bransby, William Crist, George Ehrlich, Stephen Gosnell, Leonard Koenig, Barbara Mueller

Instructor Emeritus:

Nancy DeLaurier

Professors:

Burton L. Dunbar, Craig A. Subler (graduate studio art adviser), Maude Wahlman (Dorothy and Dale

Thompson/Missouri Endowed Professor of Global Arts) Associate Professors:

Frances Connelly, Geraldine E. Fowle (undergraduate art history adviser), Kati Toivanen, Rochelle Ziskin (graduate art history adviser)

Assistant Professors:

Barry Anderson, P. Elijah Gowin, Maria Park, Paul Tosh Research Associate Professor and Joint Appointment with

Nelson-Atkins Museum of Art:

Robert Cohon

Adjunct Assistant Professor: Marilyn Carbonell

Marilyn Carbo

Curator of Slides: Carla Gilliland

Department Description

The Department of Art and Art History serves a variety of students, ranging from the nonmajor to the professionally oriented. The department offers programs leading to the bachelor of arts degree in art, art history and studio art. The master of arts is offered in art history and studio art. The department also participates in the Interdisciplinary Ph.D. program.

In the undergraduate program, art history serves as humanities electives for nonmajors, as part of the program for studio majors, and as a major field for students who wish a liberal arts major or who wish to pursue graduate study in this field.

Studio art courses are open to nonmajors who meet the appropriate prerequisites. After completing a foundation program, studio students can take work in a number of areas: drawing, painting, printmaking, graphic design, photography and electronic media. The program serves both the general studio major and those students seeking further professional training or employment in art-related fields.

There are four degree programs within the undergraduate major offered by the Department of Art and Art History: studio art, art history, general art and a combined art/art history major. In addition, the department works with the School of Education to offer a dual degree in studio art and secondary education.

Completion of an undergraduate degree with above-average performance in either art history or studio art is normally a prerequisite for further study on the graduate level.

Special Resources/Programs

The Nelson-Atkins Museum of Art

The University of Missouri-Kansas City is fortunate to be adjacent to one of the most comprehensive and distinguished art museums in the country, the Nelson-Atkins Museum of Art. In addition to having ready access to the gallery's collection, advanced students may be privileged to use the museum's other facilities, such as the reference library, the acquisition records or the museum's collections. Use of these facilities is undertaken only after consultation with a member of the faculty. All art and art history students have free admission to the museum.

The department also maintains a close relationship with the museum through joint appointments, student internships and other cooperative programs. Museum curators also lecture in art history at UMKC.

The Belger Collection

The University of Missouri-Kansas City Belger Arts Center for Creative Studies houses expansive collections by five renowned American contemporary artists: William Christenberry, Jasper Johns, Robert Stackhouse, William T. Wiley and Terry Winters. The facility's primary mission is to serve as an interactive, public educational center, dedicated to the creative process, that fosters innovative and interdisciplinary study and discussion.

Collection of Slides and Mounted Reproductions

Among the resources of the department are a curator-supervised collection of slides and mounted photographic reproductions of art. These collections may be used by students with faculty permission and supervision. Selected materials may be put out for study in conjunction with a course or may be requested for individual projects, such as a research paper. In all cases, such use is under the supervision of the curator.

Graduate Programs

The Department of Art and Art History offers the master of arts degree in art history and in studio art.

General Nature of the Program

In studio art, the program offers emphasis in drawing, painting, graphic arts, printmaking, photography and electronic media. In art history, coursework in both Western and non-Western art is available.

Applications for Graduate Study

Students are admitted to graduate study within a specific program of study, either studio art or art history.

Applications for graduate study in the Department of Art and Art History should be submitted at least one semester in advance of the application deadline. Applicants in studio art should apply by March 1 for the Fall Semester and by October 15 for the Winter Semester. There is no summer semester admission. Portfolios must be included with the applications. After portfolio review and classification by the department, an appointment for advisement will be arranged.

Studio Art Classification of Entering Students

In all cases, evidence of adequate preparatory work in the area of the proposed course is required. Admittance to graduate-credit classes is given only after a review of transcripts and portfolio. A student with an accredited B.A. in art or B.F.A. in art (or with equivalent studio background) may enroll in Art 495 or Art 498A-498N for graduate credit. Instructor's approval for each course is required, and this is contingent upon previous training (normally at least 28 hours of junior-senior studio work) and proven performance.

Requirements for Graduation

All degree candidates are required to take a minimum of 36 graduate credits, including at least three courses in art history and Art 599, Research and Thesis. Additional courses are determined in consultation with the adviser and the supervising committee for the thesis.

Art History Classification of Entering Students

Admission to the graduate program in art history requires a B.A. or equivalent degree and sufficient undergraduate study in art history to provide a sound foundation for advanced study. Ideally, this foundation would include a solid grounding in the history of Western art, some study of non-Western art, and sufficient advanced-level work to indicate that a student can succeed in the specialized or topical courses and seminars associated with graduate study. Admission review is done by a committee of the faculty.

The applicant should have, in addition to a good general education in the humanities, 18 to 24 credit hours in art history with a grade-point average of 3.0 or better. Students with fewer hours and/or a restricted exposure to other humanities and fine arts courses, or having inconsistent grades, are eligible for admission to the graduate program on the basis of recent evidence indicating the potential for success, such as performance in UMKC 400-level courses, or through papers and exams for courses elsewhere. If there are some deficiencies in preparation that can be met readily by one or two undergraduate survey courses, a student will be admitted to graduate study. However, the survey courses must be taken for undergraduate credit before the student is allowed to take the qualifying examination that is required for advancement to degree candidacy.

Applicants lacking the minimum preparation deemed necessary for admission to graduate-level study in art history may make up their deficiency through enrollment in selected undergraduate courses offered by the department. These will be determined after consultation with a faculty adviser and in all cases must include 400-level work. Progress will be reviewed at the end of each term, and if warranted, reclassification to graduate status will occur prior to the start of the next semester.

Requirements for Graduation

All degree candidates are required to take a minimum of 30 graduate credits, including Art 501, Scope and Methods of Art History; and Art 599, Research and Thesis. Other courses are determined in consultation with the adviser and the supervising committee for the thesis. In addition, a foreign language examination is required.

Special Requirements

Requirements for Retention

A student must maintain a graduate grade-point average of 3.0. In extenuating circumstances, a student may petition the Department of Art and Art History to be continued as a graduate student for one term (or 6 hours) if the graduate GPA falls below 3.0. The deficiency must be remedied during the approved probationary period if the student is to be continued.

The Qualifying Examination

There are two different qualifying examinations, one for each degree program. These are scheduled on demand. Students must have completed at least 9 hours of graduate study to be eligible, and the exam should be taken before 15 hours of graduate study applicable to the program are completed. A major purpose of the qualifying exam is to determine the readiness of students to be degree candidates; therefore, the examination is a review, both of the general competency of a

student in the chosen field of study and of the plans for the thesis. Based on the results of the qualifying examination, a planned program will be prepared; if appropriate, a foreign language examination in art history will be assigned; and a supervisory committee will be appointed. Specific details concerning each qualifying examination will be publicized at the time that the examinations are scheduled.

The Thesis or Final Project

In the last term of candidacy, a student must complete an approved project that demonstrates capacity for independent work of a suitably high level of proficiency. This project, selected in conjunction with the thesis adviser, may range from production in a selected studio medium to a research project in art history. If it is the latter, its presentation must conform to the requirements of the School of Graduate Studies. If a production thesis is selected, students must present a written statement of purpose and make an oral defense of thesis before their supervisory committee. In addition, a photographic record of the project must be made and presented to the department to be held in its visual resources collection.

Graduate Credit

Instructor's approval for each course is required, and this is contingent upon previous training (normally at least 28 hours of junior-senior studio work) and proven performance.

Art and Art History Courses

501 Scope and Methods of Art History (3). A history of the discipline, bibliography, procedures and methods, and similar topics essential to graduate-level work in art history. Every winter.

505 Graduate Technical Colloquium (3). An advanced study of technical matters pertinent to the production and study of art. Demonstration projects are required. Prerequisite: Permission of the department. Every fall.

506 Graduate Photography (3-6). Photography on the graduate level with individual selection of media and technique. Permission of the department is required. May be repeated up to a total of 15 hours.

510 Graduate Painting (3-6). Painting on the graduate level with individual selection of medium and technique. Permission of the department is required. May be repeated up to a total of 15 hours.

513 Graduate Graphic Design (3-6). Graphic design on the graduate level with individual selection of medium and technique. Permission of the department is required. May be repeated up to a total of 15 hours.

515 Graduate Drawing (3-6). Drawing on the graduate level with individual selection of media and technique. Student may pursue selected projects on a group or individual basis. May be repeated up to a total of 15 hours.

520 Graduate Printmaking (3-6). Printmaking on the graduate level with individual selection of medium and technique. Permission of the department is required. May be repeated up to a total of 15 hours.

530 Graduate Sculpture (3-6). Sculpture on the graduate level with individual selection of medium and technique. Permission of the department is required. May be repeated up to a total of 15 hours.

540 Graduate Electronic Media (3-6). Electronic media on the graduate level with individual selection of subject and technique. Permission of the department is required. May be repeated up to a total of 15 hours.

550 Graduate Performance Art (3-6). Performance art on the graduate level with individual selection of medium and technique. Permission of the department is required. May be repeated up to a total of 15 hours.

565 Seminar in American Art (3). Graduate-level seminar dealing with an announced area in American art. May be repeated once, provided there is a change in the area of concentration. Permission of the department is required.

566 Seminar in 19th-Century Art (3). Graduate-level seminar dealing with an announced area in 19th-century art. May be repeated once, provided there is a change in the area of concentration. Permission of the department is required.

567 Seminar in 20th-Century Art (3). Graduate-level seminar dealing with an announced area in 20th-century art. May be repeated once, provided there is a change in the area of concentration. Permission of the department is required.

570 Seminar in Renaissance Art (3). Graduate-level seminar dealing with an announced area in Renaissance art. May be repeated once, provided there is a change in the area of concentration. Permission of the department is required.

571 Seminar in Art of Africa, Oceania and New World Cultures (3). Seminar in art of Africa, oceania and new world cultures. May be repeated

once, provided there is a change in the area of concentration. Permission of the department is required.

572 Seminar in Asian Art (3). Seminar dealing with an announced area in Asian Art. May be repeated once, provided there is a change in the area of concentration. Permission of the department is required.

573 Visual Arts Administration (3). This course on professional arts administration includes assignments in: copyright laws, database management, ethics issues, evaluation design, gallery museum management, grant writing and budgeting, public relations, resume design, tax laws, and website design and management. Students are required to learn relevant computer programs. This course is also open to music and theatre majors. Research requirements for graduate credit are more comprehensive and professional.

575 Seminar in Baroque Art (3). Graduate-level seminar dealing with an announced area in Baroque art. May be repeated once, provided there is a change in the area of concentration. Permission of the department is required.

590 Directed Studies in Art History (2-4). Individually directed studies or research in selected topics or problems in art history. Permission of the department is required. May be repeated up to a total of six hours applicable to a degree program.

591 Directed Technical Studies (2-4). Individually directed studies or research in selected projects of a technical nature in studio art. Permission of the department is required. May be repeated up to a total of six hours applicable to a degree program.

599 Research and Thesis (1-9). Production and/or writing of thesis. Usually taken in the last term of candidacy. Permission of the department is required.

699 Research and Dissertation (1-12). Dissertation Research and writing in Art History. Prerequisite: Consent of advisor

Department of Chemistry

205 Spencer Chemistry Building 5009 Rockhill Road (816) 235-**2273** Fax: (816) 235-**5502** chemistry@umkc.edu http://www.umkc.edu/chem

Mailing Address

University of Missouri-Kansas City Department of Chemistry SCB 205 5100 Rockhill Road Kansas City, MO 64110-2499

Department Chair:

Y. C. Jerry Jean

Professors Emeriti:

Kuang L. Cheng, John W. Connolly, Wesley Dale, Henry A. Droll, Eckhard W. Hellmuth, Peter F. Lott, Layton L. McCoy, Frank Millich, Timothy F. Thomas

Curators' Professors:

Y.C. Jerry Jean (chemistry and physics, chair), James R. Durig (chemistry and geosciences), Charles J. Wurrey (curators' distinguished teaching professor; executive associate dean, College of Arts and Sciences)

Professors:

- Jerry R. Dias, Thomas C. Sandreczki, Kenneth S. Schmitz, Zhonghua Peng (principal graduate adviser) Associate Professors:
 - Keith R. Buszek, Peter Groner (director of laboratories), Andrew J. Holder, Kathleen V. Kilway (principal undergraduate adviser)

Assistant Professors:

J. David Van Horn, Ekaterina N. Kadnikova

Visiting Assistant Professor:

Todor K. Gounev

Department Description

The Department of Chemistry offers programs of study leading to the bachelor of arts, bachelor of science and master of science degrees, and participates in UMKC's Interdisciplinary Ph.D. program. To the extent that each program is flexible (see degree requirements), it is possible to specialize at the graduate level in the areas of analytical, inorganic, organic, physical or polymer chemistry.

Graduate Study in Chemistry The Chemistry Department offers programs leading to the

The Chemistry Department offers programs leading to the master of science degree, with an emphasis in analytical, inorganic, organic, physical or polymer chemistry.

Doctor of philosophy (Ph.D.) programs at UMKC are interdisciplinary. Students desiring to study at the doctoral level in the discipline of chemistry must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific admission requirements for the doctoral degree may be found in the General Graduate Academic Regulations and Information section of this catalog.

Students pursuing Interdisciplinary Ph.D. study who have selected chemistry as one of their disciplines should consult the School of Graduate Studies section of this catalog for degree requirements and other academic regulations applicable to their degree programs.

General Nature of the Graduate Program

Both the master of science degree and Interdisciplinary Ph.D. degree with chemistry as the coordinating discipline have the basic aim of training students to work independently in the

chemical area. Both programs train the student with a broad but flexible base of coursework for future building and self-teaching, but the Interdisciplinary Ph.D. places much greater emphasis on original research.

There are two programs or tracks that lead to the master of science in chemistry: the research track and the non-thesis track. The Interdisciplinary Ph.D. with chemistry as the coordinating unit is a research track. (For further information on the Interdisciplinary Ph.D. program, see the chemistry subsection of the School of Graduate Studies section.)

Master of Science Program

Requirements for Admission

Applicants should have the equivalent of an American Chemical Society (ACS)-approved bachelor's degree in chemistry. This includes the equivalent of: general chemistry and quantitative analysis, one year of organic chemistry, one year of physical chemistry with prerequisites of one year each of physics and calculus, and the ACS-recommended distribution of advanced courses and course credits. (For example, see UMKC's B.S. program in chemistry in this catalog.) Applicants should take particular note of the physical chemistry requirement. Applicants may be admitted as provisional students if they have a limited number of undergraduate deficiencies. They will be notified, at the time that admission is offered, of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of "C" or higher.

Applicants from foreign countries who have an official language other than English must present scores of at least 550 on the Test of English as a Foreign Language (TOEFL) to be considered for admission.

Placement Examinations

Incoming students must take placement examinations in analytical, inorganic, organic and physical chemistry. Placement examinations are typically administered the week preceding the first week of classes of the fall and winter semesters. Students scoring below the 50th percentile in the organic and/or physical chemistry exams are required to enroll in CHEM 520R and/or CHEM 530, respectively. Enrollment in other graduate organic physical chemistry courses is not permitted until CHEM 520R or CHEM 530, respectively, is(are) successfully completed. Two grades of C+ (2.3 out of 4.0) or lower, or one grade of less than C- (1.7 out of 4.0) in CHEM 520R or CHEM 530 will result in termination from the degree program. These courses may not be counted toward the M.S. coursework requirements below. Students must complete all additional coursework required as a result of the placement exam scores by the end of their first full year.

Graduate Program Committee

Upon admission to M.S. study in chemistry, students will be advised by the department's principal graduate adviser, acting on behalf of the chemistry graduate program committee. Based on the committee's evaluation of the students' transcripts and placement exam score, the principal graduate adviser will inform students of any deficiencies and how they may be removed. The principal graduate adviser also will advise students on course curriculum. (In the thesis program, curriculum advising is performed by the research adviser, once selected.) The graduate program committee serves as the supervisory committee for non-thesis M.S. students.

Seminar Attendance

Full-time M.S. students are required to attend all regularly scheduled and special departmental seminars and colloquia.

Part-time students are also required to attend these seminars but may petition the chair of the Department of Chemistry to waive this requirement each semester but one; such students will be required either to attend and participate fully during one semester, including the presentation of a one-hour seminar (see details below), or to present two one-hour seminars in lieu of full participation.

Minimum Requirements for Master of Science Degree

In addition to the requirements listed here, M.S. students are subject to all general M.S. requirements of the University. See the School of Graduate Studies section of this catalog for a complete listing.

Research M.S. Program

Time Constraints and Financial Assistance

Full-time thesis M.S. students are required to complete all requirements for their degree within four years. In compelling circumstances, and on the written recommendation of a majority of the Supervisory Committee, a single extension for up to one year may be requested for approval by the chair of the Department of Chemistry. Part-time thesis M.S. students are required to complete all requirements for their degree within seven years.

Full-time thesis M.S. students may receive financial support from the Department of Chemistry for a maximum of two-and-one-half years. Students from countries having an official language other than English, and who wish to be supported as GTAs, are to take the SPEAK test before the end of their first semester on campus if necessary. Part-time thesis M.S. students are not eligible for financial support from the Department of Chemistry.

Research Adviser and Supervisory Committee

Full-time students must select a research adviser from the graduate faculty of the Department of Chemistry and a supervisory committee by the end of their first regular (i.e., fall or winter) semester on campus. Part-time students must select their research adviser and supervisory committee by the end of their third year after enrollment in their first course as an M.S. student at UMKC.

The research adviser becomes chairperson of the supervisory committee, which includes at least two additional members of the graduate faculty. Students and their supervisory committee shall plan a program of study which, when met, will qualify students for the M.S. degree. This program of study must be approved by the supervisory committee, the department chair and the principal graduate adviser prior to the completion of 15 hours of coursework applicable to the degree. The supervisory committee is responsible for conducting the final thesis examination for students in the thesis program.

Coursework

The emphasis of this program is on research. A minimum of 31 credit hours (including research and thesis) is required. Full-time research M.S. students should be able to complete the formal coursework requirement no later than the end of their second year. Thesis M.S. students are required to complete:

- 1. Three credit hours from one of the following Physical Chemistry courses: CHEM 531, CHEM 532, CHEM 533, CHEM 534, or CHEM 535;
- 2. Three credit hours from Organic Chemistry: CHEM 521R, or CHEM 522;

- 3. Six credit hours from Analytical, Inorganic, Polymer, Bioorganic, and Environmental Chemistry courses: CHEM 541R, CHEM 551R, CHEM 571R, CHEM 567, CHEM 587;
- 4. Two additional graduate-level courses for a minimum of 6 credit hours;
- 5. One credit hour seminar presentation (CHEM 611);
- 6. In addition to the formal coursework requirements, a minimum of 6 credit hours of research and thesis (CHEM 599) are required. Research and thesis (CHEM 599) work must be done under the direction of the student's research adviser; and
- Up to 6 credit hours of directed studies (CHEM 590) may be applied toward the degree requirements. Additional coursework may be substituted for part or all of (CHEM 590) on approval of the student's supervisory committee.

The courses selected must be approved by the student's supervisory committee. Students who receive a grade of C+ (2.3) or lower in more than two courses applicable to the M.S. program or who have a GPA lower than 3.0 on courses (not including CHEM 590, CHEM 599 or any undergraduate courses) applicable toward the M.S. degree after completing 18 or more credit hours of such courses, will be terminated from the degree program.

Students who have received a grade of B- (2.7) or better in graduate coursework taken as part of a degree program at another institution may transfer up to 6 credit hours of this work on approval of a majority of the student's committee. A written request for this approval must be submitted within one year of full admission to the program.

Seminar Presentation (CHEM 611)

Students must present a one-hour seminar based on their thesis research project. This seminar will include an exhaustive review of the literature pertinent to their project and a description of the objectives, the proposed methodology, and the significance of this research. Students must register for CHEM 611 and present this seminar during the semester following selection of their research adviser and committee.

Thesis Defense

The candidate's thesis must be prepared following all guidelines required by the UMKC School of Graduate Studies. All supervisory committee members must receive a final draft of the thesis for approval of form and content at least two weeks before submission to the dean of the School of Graduate Studies. Candidates should submit preliminary drafts of their thesis to their supervisory committee well in advance of this deadline. After the thesis is certified for acceptance by the dean of the School of Graduate Studies, the student must present an oral defense of his/her research in the form of a thesis seminar. The supervisory committee will make a final determination of the acceptability of the thesis immediately following this presentation. Only minor changes may be made to the thesis at this point.

Non-thesis M.S. Program Time Contraints and Financial Assistance

The non-thesis M.S. degree program is intended primarily for students currently employed in a chemically related industry. Full-time non-thesis M.S. students are required to complete all requirements for their degree within four years. Part-time non-thesis M.S. students are required to complete all requirements for their degree within seven years. Non-thesis M.S. students are not eligible for financial support from the Department of Chemistry.

Coursework

The emphasis of this program is on coursework. Non-thesis M.S. students are required to complete a minimum of 31 credit hours of graduate-level coursework. Of these credit hours,

- 1. Three credit hours must be from Organic Chemistry courses: CHEM 521R or CHEM 522.
- 2. Three credit hours from Physical Chemistry courses: CHEM 531, CHEM 532, CHEM 533, CHEM 534, CHEM 535.
- 3. Nine hours from Analytical, Inorganic, Polymer, Bioorganic, and Environmental Chemistry courses: CHEM 541R, CHEM 551R, CHEM 571R, CHEM 567, CHEM 587.
- 4. One credit hour seminar presentation (CHEM 611).
- 5. The remaining 15 credit hours may be taken from courses approved by the graduate program committee.

Students who receive a grade of C+(2.3) or less in more than two courses applicable to the M.S. program, or have a cumulative grade-point average of less than 3.0 on courses applicable toward the M.S. degree after completing 18 or more credit hours of such courses, will be terminated from the degree program. Grades received for CHEM 590 and any undergraduate-level courses are not included in the minimum GPA calculation.

Students who have received a grade of B- (2.7) or better in graduate chemistry coursework taken as part of a degree program at another institution may have up to 6 credit hours of equivalent required coursework waived upon approval of a majority of the graduate program committee. A written request for this approval must be submitted within one year of full admission to the M.S. program.

Seminars

Students must present a one-hour literature seminar based on a topic of their choice approved by the Department of Chemistry chair (or designated appointee). Students must register for CHEM 611 the semester of this presentation. This seminar will include an exhaustive review of the pertinent literature and discussion of both present and future implications of research in this area. An abstract is to be posted and distributed one week prior to the presentation date.

Research Facilities

Major instrumentation includes: ultraviolet-visible, Fourier transform infrared, Raman, nuclear magnetic resonance (250 and 400 MHz), electron spin resonance, and positron annihilation spectroscopies; high-resolution mass spectrometry; X-ray diffraction and flourescence; laser light scattering; and other standard chemical instrumentation. Computer facilities include UMKC's cluster of high-end work-stations using HP's Alpha technology, and numerous personal computers located in the Spencer Chemistry Building for teaching and research purposes. A computational research laboratory is also housed in the department with a number of high-speed workstations and modern software. Support facilities include an electronics shop and a glass-blowing laboratory.

Emphasis Areas

Analytical

Research in analytical chemistry is focused on: gas chromatography, mass spectrometry, and Fourier transform infrared, Raman and positron annihilation spectroscopy techniques.

Inorganic

Research in inorganic chemistry is focused on: synthetic and mechanistic organometallic chemistry and correlation of electronic structure calculations with experimental measurements; bioorganic chemistry of heavy metals.

Organic

Research in organic chemistry is focused on: synthesis and molecular architecture of bile acids and benzenoid hydrocarbons; synthesis and reactions of organic polymers and organometallic compounds; synthesis and physical studies of novel host-guest systems; polymerization of polyethers using organoruthenium complexes; synthesis and elucidation of natural products and antitumor agents; organic reactions catalyzed by enzymes; biosensors.

Physical

Research in physical chemistry is focused on: using infrared and Raman spectroscopy to determine molecular conformations; developing infrared spectroscopic techniques for the analysis of environmental pollutants; using *ab initio* and semi-empirical computational methods to predict chemical and physical properties of interesting chemical species; characterization of electronic and free-volume properties in materials; positron and positronium chemistry; organic conductivity and superconductivity; studying dynamic light scattering from polyelectrolytes; obtaining photodissociation spectra of atmospheric ions; and deriving thermodynamic properties of ions from mass spectrometric appearance potentials.

Polymer

Research in polymer chemistry is focused on: synthesis of novel organic and organometallic polymers; characterization of electronic optical and electrical properties, free volumes, phase transitions, relaxation phenomena, diffusion of gases and molecular weight distributions; designs of semiconducting polymers; molecular architectures and self-assembled polymer networks.

Chemistry Courses

511 Laboratory Safety and Health I (1). An introduction to laboratory safety and health. Topics to be discussed include good laboratory practice; laboratory hazards; safe chemical handling; storage and disposal; first aid; protective equipment; and federal regulations.

520R Survey of Organic Chemistry (3). An intensive advanced survey of the structure, synthesis and reactions of organic compounds. Three hours lecture a week.

521R Mechanisms of Organic Reactions (3). A comprehensive course in which the mechanisms of organic reactions are discussed in light of modern chemical principles. Prerequisites: Chemistry 322R and 432. Three hours lecture a week.

522 Synthetic Organic Chemistry (3). A critical approach to the synthesis and modification of organic molecules; newer methods will be emphasized. Prerequisites: Chemistry 322R and 432. Three hours lecture a week.

529 Selected Topics in Organic Chemistry (3). Selected topics from the chemistry and theories of organic structures with particular attention to recent developments. Three hours lecture a week.

530 Systematic Physical Chemistry (3). An intensive and comprehensive review of the principles of physical chemistry. Three hours lecture a week.

531 Classical Thermodynamics (3). A rigorous treatment of the laws of thermodynamics and their application to ideal and non-ideal equilibrium systems. Three hours lecture a week.

532 Chemical Kinetics (3). Empirical analysis of chemical reaction rates. Theories of unimolecular and bimolecular reactions, reactions in solution and complex reactions. Review of modern and classical techniques used to study chemical kinetics. Three hours lecture a week.

533 Quantum Chemistry (3). Application of quantum mechanical methods to the study of systems of chemical interest. Exact solutions and approximate methods will be discussed. Three hours lecture per week.

534 Molecular Spectroscopy (3). A theoretical introduction to molecular spectroscopy and its relation to structure. Electronic, vibrational and rotational spectra of chemical systems will be discussed.

535 Statistical Thermodynamics (3). A rigorous treatment of the fundamental concepts of statistical thermodynamics, with applications to specific systems that reflect the interests of students participating in the course.

536 Photochemistry (3). A study of the fundamental photochemical and photophysical processes which follow absorption of radiation by a molecule and the techniques used to study these processes.

539 Selected Topics in Physical Chemistry (3). Selected topics and recent developments in physical chemistry. Prerequisite: Chemistry 530 or consent of instructor. Three hours lecture a week.

541R Advanced Analytical Chemistry (3). An intensive review of modern concepts of analytical chemistry. Prerequisite: Chemistry 432. Three hours lecture a week.

549R Selected Topics in Analytical Chemistry (3). Selected topics and recent developments in analytical chemistry, including modern instrumental methods, electrochemical methods and separation methods. Topics vary from year to year. Prerequisite: Chemistry 442 or Chemistry 541R.

551R Advanced Inorganic Chemistry I (3). A systematic treatment of bonding, structure, reactions and reaction mechanisms of inorganic compounds, with emphasis on classical transition metal compounds and organometallic compounds. Prerequisite: Chemistry 451 or equivalent.

552R Coordination Chemistry (3). A study of the structures, dynamics and properties of complex ions and metal chelates. Prerequisite: Chemistry 551R or consent of instructor. Three hours lecture each week.

553R Organometallic Chemistry (3). A survey of the synthesis, structure and reactions of organometallic compounds. Prerequisite: Chemistry 551R or consent of instructor. Three lecture hours each week.

559 Selected Topics in Inorganic Chemistry (3). Various special topics in the inorganic area to be offered in different semesters. Prerequisite: Chemistry 551R or consent of instructor. Three hours lecture a week.

567 Advanced BioOrganic Chemistry (3). This course examines the organic chemistry and laboratory synthesis of the major biopolymers and organic chemistry related to biological systems. Emphasis is on literature and library research and natural product and solid phase organic synthesis, combinatorial synthesis, bioconjugates and applied bioorganic chemistry. Prerequisites: BA/BS in Chem.,Biol., etc including Org. Chem 1yr. Offered: Every Fall Shares CHEM 367 lecture

571R Introduction to Polymer Chemistry (3). Survey of organic and inorganic monomers and polymers; the occurrence, synthesis, structures and properties of natural and synthetic polymers; discussion of general properties of plastics, elastomers, fibers, resins and plasticizers. Prerequisite: Chemistry 432. Three lecture hours a week.

575 Physical Chemistry of Macromolecules (3). Rigorous treatment of the physical chemistry of polymer characterization, and polymer structure, configuration, size and shape in solutions and the solid state. Prerequisite: Chemistry 432. Three lecture hours a week.

576 Free Radical Reactions (3). Theory and survey of reactivity and structure, kinetics, thermodynamics, and stereochemistry of free radical reactions; e.g., autoxidation, halogenation, thermal bond cleavage, vinyl copolymerization, double bond addition, chain reactions, etc. Prerequisites: Chemistry 322R and 432. Three lecture hours a week.

577 Laboratory Techniques of Polymer Chemistry I (3). Synthesis of polymers and copolymers by catalyst and photoinitiation, involving bulk, solution, emulsion and Ziegler hetero-catalysis polymerization processes. Evaluation of some polymer properties. One lecture hour and six laboratory hours a week.

579R Selected Topics in Polymer Chemistry (3). Selected topics and recent developments in specialized fields of polymer chemistry. Presented at intervals, topics vary from year to year.

580R Computer Applications to Chemical Problems (3). An intense course in FORTRAN programming and its uses in chemical problems related to theory and experimentation. Emphasis will be placed on the mathematical structures of the chemical problems and the coding of these problems into Fortran. No previous programming experience is required.

587 Environmental Chemistry I (3). A survey of how chemical principles can be applied to the environment. Included will be topics in aquatic chemistry, atmospheric chemistry and chemistry of the geosphere and soil.

588 Environmental Chemistry II (3). Discussion of selected topics in advanced environmental chemistry, such as environmental toxicology, environmental risk, the chemistry of hazardous wastes and their treatment, and environmental analytical chemistry.

590 Directed Studies (1-3). Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor.

598 Research Methodology Conference (3). Student will meet on an individual basis with two faculty members who are involved in research. The student's adviser will coordinate this course.

599 Research and Thesis (1-9). Research for thesis.

611 Chemistry Seminar (1). Presentation and discussion of topics currently appearing in United States and foreign literature. One hour each week.

699 Research and Dissertation (1-16). Research for dissertation.

Department of Economics

211 Haag Hall 5120 Rockhill Road (816) 235-**1314** Fax: (816) 235-**2834** economics@umkc.edu http://www.umkc.edu/economics

Mailing Address

University of Missouri-Kansas City Department of Economics HH 211 5100 Rockhill Road Kansas City, MO 64110-2499

Department Chair:

James I. Sturgeon,

Undergraduate Adviser: Karen S. Vorst, (816) 235-2838

Graduate Advisers

Frederic S. Lee, (816) 235-**2543**

L. Randall Wray, (816) 235-**5687**

Administrative Assistant

Jennifer Harris, (816) 235-**2405**

Professors Emeriti:

W. Robert Brazelton, L. Kenneth Hubbell, A. Ross Shepherd, F. Eugene Wagner, John O. Ward

Professors:

Michael Hudson (Distinguished Research Professor), Jan Kregel (Distinguished Research Professor), Frederic S. Lee, James I. Sturgeon, Karen S. Vorst, L. Randall Wray

Associate Professors:

Peter J. Eaton, Mathew Forstater

Assistant Professors:

Stephanie Bell, Cornelia Wunsch (Assistant Research Professor)

Lecturers:

Judith Ancel, John Henry, Michael Kelsay, Ben Young

Research and Instructional Centers

Center for Economic Information: Peter Eaton, director Douglas Bowles, assistant director Sara Ballew, programmer/analyst Saima Sami, programmer/analyst Center for Full Employment and Price Stability: Mathew Forstater, director Pavlina Tcherneva, associate director Kelly Pinkham, program development L. Randall Wray, senior research associate Stephanie Bell, research associate Institute for Labor Studies: Judith Ancel, director Marcia Mayne, research associate

Department Description

The Department of Economics is committed to promoting excellence in broad-based undergraduate programs; graduate and interdisciplinary doctoral education; research; and community, university and professional service. The department focuses its research, teaching and service efforts on the urban mission of the University by fostering a diversity of research and teaching perspectives for faculty and students.

The department offers an undergraduate major that can be completed either through day or evening classes and is a major participant in PACE (Program for Adult College Education). The department offers an M.A. degree, an M.A. applied degree in economics, and is a coordinating discipline in the doctoral Interdisciplinary Ph.D. program. Most graduate courses are offered after 4 p.m.

Center for Economic Information

210 Haag Hall 5120 Rockhill Road (816) 235-**1394** http://www.umkc.edu/cei

The Center for Economic Information was established in November 1994 with the goal of making local, regional and national information accessible to economic decision-makers in the Kansas City metropolitan area. The CEI is affiliated with the Department of Economics and the College of Arts and Sciences.

The center is involved in research, teaching and outreach activities. The primary expertise of the center is in application of Information Technology for economic analysis.

Center for Full Employment and Price Stability

211 Haag Hall 5120 Rockhill Road (816) 235-**5835** http://www.cfeps.org

The Center for Full Employment and Price Stability is a non-partisan, non-profit policy institute at the University of Missouri - Kansas City dedicated to promoting research and public discussion of issues related to macroeconomic and monetary policy, especially employment and budgetary policy.

This national policy center produces original research and sponsors national and international workshops on the use of full employment policies to achieve both economic growth and price stability. The Center funds doctoral assistantships in the department and provides financial support to faculty members participating in C-FEPS research at UMKC and other universities, such as Harvard University, New School University, University of Ottawa and others. The Center continues to add prominent faculty to its research staff. C-FEPS fully participates in the Interdisciplinary Ph.D. program and provides interdisciplinary research links among the faculty and students at the economics department, other social science departments at UMKC as well as among an international community of scholars concerned with the issues of full employment and price stability.

In an effort to incorporate research into policy, the Center sponsors interdisciplinary, non-partisan research, collaborates with universities, organizes symposia, conferences, and lectures, and participates in community programs.

Institute for Labor Studies

408D Royall Hall 800 E. 52nd Street (816) 235-**1470** http://www.umkc.edu/labor-ed

The Institute for Labor Studies provides labor education for the unions and working people of the Kansas City Metropolitan area. It is a joint project of UMKC and Longview Community College. At UMKC it is part of the Economics Department and offers a credit certificate in labor studies, which includes six courses. It also provides other labor education courses (both credit and non-credit), conferences, research projects and consulting. Special projects include a Labor in the Schools program and the Heartland Labor Forum, a weekly one-hour radio show on KKFI community radio.

The Hospitality Studies Degree Concentration program is housed admistratively within the department. It provides students with the fundamentals of hospitality administration within a liberal arts program, drawing on the social science discipline.

The department houses the Missouri Council for Economic Education. MCEE is the statewide provider of economic education training for elementary and secondary education.

The department is the administrative home of the Social Science Consortium. The SSC is a co-discipline for the Interdisciplinary Ph.D. program. The SSC faculty is drawn from the departments of economics, political science and sociology.

The department sponsors the *Journal of Forensic Economics*, which is the journal of the National Association of Forensic Economics. Nancy Eldredge is the production editor for the journal and Jack Ward is the editor.

Our Students

The department provides undergraduate and graduate service courses to the College of Arts and Sciences, the Bloch School, and the School of Interdisciplinary Computing and Engineering. Undergraduate and graduate majors participate in a variety of visiting lecture programs and faculty colloquia through the Economics Club; Omicron Delta Epsilon (the economics honorary society); the Center for Full Employment and Price Stability; and the Social Science Consortium. Students publish their own academic journal. Enrollment is international, with current and former students representing more than 25 countries.

Faculty and Facilities

Faculty members of the department maintain active, extensive research programs and a strong commitment to teaching – holding four outstanding teaching awards. Faculty members have served as presidents for national and regional economic associations and lectured and conducted research in the Fulbright Program, the Ford Foundation, the U.S. Department of Commerce, and the U.S. Department of Labor. Faculty members have established national reputations in a number of research fields. For a small faculty, the department has ranked high among other economics departments at comparable institutions nationally.

Current regular faculty membership consists of six professors, two associate professors, one assistant professor and four lecturers. The faculty are cooperative and highly interactive with students, resulting in several team-taught PACE block classes, other team-taught classes and collaborative research.

The department offers graduate assistantships, augmented with additional funding through the Center for Full Employment and Price Stability and the Social Science Consortium.

The Department of Economics and the Center for Economic Information are housed in Haag Hall. The Center for Full Employment and Price Stability, faculty and other department programs are housed in Manheim Hall. Students have access to state-of-the-art computer labs and classrooms.

Information

You may request information about economics programs by calling the department's main number, (816) 235-**1314**; visiting the Web site, http://www.umkc.edu/economics; or sending an information request via e-mail to economics@umkc.edu.

For specific information on degree programs, contact Karen S. Vorst, Undergraduate Adviser, (816) 235-**2838** or vorstk@umkc.edu; Frederic Lee, Graduate Admissions Adviser, (816) 235-**2543** or leefs@umkc.edu.

Department Goals

As part of its urban mission, the department continues to expand its research, grants and service performance through the Center for Economic Information; the Center for Full Employment and Price Stability; and the Institute for Labor Studies.

The immediate goals of the department are to:

- 1. Establish a nationally recognized reputation for research of planning based on GIS analysis through the CEI;
- 2. Establish a nationally recognized academic reputation through the research output of the C-FEPS;
- 3. Develop a community service component of graduate education using an internship system;
- Expand UMKC's high-quality Interdisciplinary Ph.D. program, which uses the resources of the CEI, C-FEPS and extensive, applied research experience of the department's faculty;
- 5. Maintain the highest standards of teaching quality in undergraduate and graduate programs.

Master of Arts: Economics

The Department of Economics offers a master of arts degree. The M.A. program seeks to provide students with a broad level of competence in economics. Students are encouraged to extend the reach of their scholarship to acquire a wide-ranging foundation in addition to technical mastery of theory and quantitative methods. This is done through the combination of required and elective courses.

Career Implications

The master of arts in economics is designed as a preparation for further graduate training at the doctoral level and for professional positions in industry, business, government, teaching and research. Courses may be taken in areas other than economics with the approval of the graduate adviser.

The master of arts with an emphasis in applied economics is designed to prepare students for industry, business, government, trade, research and policy in urban-regional economic analysis.

Advising System

Students should consult with the graduate adviser, Frederic Lee, (816) 235-**2543**, or leefs@umkc.edu, to plan their graduate program of study.

Admission Requirements

Students may be admitted for graduate study in economics if they have a baccalaureate degree in economics from an accredited college or university with an overall grade-point average of at least 2.5 on the 4.0 scale (or the equivalent). Applicants whose undergraduate GPA is less than 2.5 may be considered for admission upon petition to the Graduate Admission Committee of the Department of Economics.

Students who have a baccalaureate degree with an overall undergraduate GPA of 2.5 or better and who did not major in economics may be admitted to the program upon consultation with the department's principal graduate adviser and on demonstrating proficiency in the following areas:

- Intermediate Macroeconomic Analysis,
- Intermediate Microeconomic Analysis and
- Introductory Statistics

All students with less than a 2.5 (4.0 scale) GPA prior to admission shall be required to take the general Graduate Record Examinations (GRE) and obtain a score of 1000 or greater on the verbal and quantitative and at least a 4.0 on the analytical portions. International students who have studied less than two years (full time) in a U.S. academic program or a comparable program in an English-speaking country are required to have TOEFL score of 550 or above or 213 on the computer-based test.

Degree Requirements

Thirty hours of graduate work are required for the M.A. in economics. The following required courses (15 hours) and their prerequisites are listed:

ECON 501 Advanced Macroeconomic Analysis (301 Macroeconomic Analysis)

- ECON 502 Advanced Microeconomic Analysis
 - (302 Microeconomic Analysis and
- 521 Mathematical Economics)
- ECON 521 Mathematical Economics
- ECON 525 Econometric Methods
- (425 Int. Economic Statistics)
- ECON 551 Advanced Institutional Theory (451 Institutional Economic Theory)

With only extraordinary exception the above is the schedule of class offerings by the Economics Department. Substitutions for the above prerequisites may be approved by the graduate adviser.

ECON 521 is waived if students have completed ECON 421 or its equivalent. In the event students have not had ECON 421 they should take ECON 521. Calculus is strongly recommended as a prerequisite for ECON 521.

ECON 425 is required for all students who have not had it, or something very much like it.

Econ 451 is required for all students who have not had an approved substitute - see graduate adviser.

An additional 15 hours of coursework must be completed. Up to nine of these hours may be in selected 400-level courses in economics and related disciplines, upon consultation with the graduate adviser. Graduate credit toward the M.A. in economics is not given for courses at the 300 level. No more than 6 hours of ECON 590, Special Topics, may be counted toward graduation.

For students not entering in the fall semester, it is strongly recommended that ECON 521 (Mathematical Economics) be taken at the first opportunity. The prerequisites for graduate courses are very important and must be completed prior to enrollment in courses with prerequisites. Graduate students in economics must also comply with the general graduate academic regulations as found in the School of Graduate Studies section of this catalog.

Requirements for Retention

Students are expected to maintain a high degree of academic excellence. Students must maintain a minimum of a 3.0 graduate grade-point average. A student who receives a grade of C+ or lower will receive an academic warning. Students who receive a grade of C or C- in two classes, or a grade of D+ or lower in one class, will be dropped from the program. A maximum of 3 hours of 2.0 (C) in graduate courses will be permitted to count toward graduation. A 3.0 (B) must be earned in all undergraduate courses approved for graduate credit and in ECON 590 and ECON 599.

A student is required to fill out a "program of study" with the graduate adviser before the completion of 15 hours of coursework. At that time, the graduate committee will consider the student's performance and make a recommendation with regard to retention of the student. After being approved by the College of Arts and Sciences graduate officer, the program of study is filed with the UMKC Records Office and may be amended upon consultation with the graduate adviser.

Requirements for Graduation

Students on the elective courses track are required to complete 15 hours beyond the required courses. Of these, 6 hours must be at the 500 level. Students on the project track complete a supervised applied research project which counts as part of the 15 hours beyond the required courses. The number of hours for the project depends on its scope and is determined by students and their project adviser. For more information about the project, see the Graduate Adviser. Depending on the scope of the project, students are required to take 3 to 6 hours from among the following courses:

591 Research and Planning Seminar (required) 599 Research and Thesis (591 prerequisite)

Interdisciplinary Ph.D.

The Department of Economics participates in the Interdisciplinary Ph.D. program.

The department also administers and participates in the Social Science Consortium, which is a co-discipline in the Interdisciplinary Ph.D. program. For information about these programs see the School of Graduate Studies section in this catalog, contact the Department of Economics, (816) 235-**1314**, or Frederic Lee, graduate adviser, (816) 235-**2543**, or leefs@umkc.edu.

Economics Courses

501 Advanced Macroeconomic Analysis (3). Basic theoretical concepts of national income and statistical tools utilized in its measurement. Aggregate demand and supply as problems of economic dynamics. The course includes examination of the primary competing theoretical approaches: neoclassical, Keynesian, new classical, real business cycle, new keynesian supply side, Austrian, and Post Keynesian. Topics covered inclue growth, money, labor markets consumption, investment, expectations formation, role of time and uncertainty, equilibrium and disequilibrium analysis, exchanges rates, international trade. and optimal currency areas. Policy implications of the various macroeconomic theories are explored. Prerequisites: Economics 301 and 302, or their equivalent. Offered: Fall 2001.

502 Advanced Microeconomic Analysis (3). The course first provides a critical survey of neoclassical microeconomic theory, including methodology, demand theory, production and cost theory, theory of competitive and non-competitive markets, distribution, welfare, and general equilibrium. It then introduces heterodox microeconomic theory, covering its historical origins, methodology, structural organization of economic activity, in-put-output models, flow of funds, agency and institutions, and the business enterprise. Prerequisites: Economics 302, 521

504R American Economic History Since 1865 (3). The course deals with the emergence of Industrial America since 1865. It will cover the rise to dominance of the large modern corporation, with the problem of economic and social instability and stability, with the rise of trade associations, cartels, and government regulation in an unstable economy, and with the evolution of American economic policy and national economic planning. The course is the same as History 566R.

505 Advanced Comparative Economic Systems (3). Contents vary depending upon the instructor's design for the course. Prerequisite: Economics 301, 302.

506 Advanced History of Economic Thought (3). This seminar uses issues raised in the reading of two 'classic' primary texts, Adam Smith's An Inquiry into the Nature and Causes of the Wealth of Nations (1776) and John Maynard Keynes's The General Theory of Employment, Interest and Money (1936), as points of departure for the examination of a series of topics in the history and development of economics and alternative paradigms in the discipline. These investigations will lead lus to the study of a number of other seminal articles, representing alternative approaches in the field. Topics include competition, accumulation, path dependence and endogenous technical change, cumulative causation, the laws of return, money and credit, capital theory, and more. Prerequisites: Economics 301, 302

508 Controversial Issues in Recent Economic Literature (3). This course will focus on theoretical and policy-oriented controversies that have occured in economic in the 20th century. The type of controversies covered include, but are not restricted to, money, unemployment, business cycles and economic growth, pricing and administered prices, capital controversy, labor theory of value controversy, and free trade vs. protectionism. While the course

concentrates on recent debates, it identifies the origins of the modern disputes in earlier controversies. For each controversy, its real world importance and policy implications are discussed.

512 Advanced Economic Development (3). Contents vary depending upon the instructor's design. Prerequisite: Economics 301, 302.

513 Economic Cycles and Growth (3). A critical review and evaluation of economic analysis and the forces of economic fluctuation and growth; and analysis of statics, dynamics, monopolistic competition, the role of the interrelationships of the market structure and other institutional forces as they relate to fluctuations and growth. An emphasis will be made on the critical evaluation of recent literature in the field of economic analysis related to fluctuations, growth, statics, dynamics, market structure and the reinterpretation of economic fluctuations, growth, forecasting and overall economic behavior. An analysis of the technological, monetary, and fiscal policy implied by economic trends and growth will also be discussed. Prerequisite: Economics 501 or its equivalent or by special permission of the instructor.

516L Law And Economics (3). This course will examine the use of economic principles in the analysis and applicatins of public and private law. Emphasis will be given to the efficiencies of laws in meeting social objectives, how laws can be modified to become more economically efficient, and the uses of economics in the actual practice of the law. Issues covered will include proofs of liability in antitrust, contracts and employment law using statistical and economic analysis, and the calculation of economic damages in commercial, employment and personal injury/death litigation.. Graduate students will be assigned a specific research paper.. Prerequisites: Econ 302 or consent of instructor.

521 Mathematical Economics (3). An introduction to mathematical methods as applied to the questions addressed by economists. The principal methods to be applied are matrix algebra and differential calculus in the context of optimization. Other topics may include integral calculus, differential equations, difference equations or linear and nonlinear programming. Prerequisites: Economics 301, 302 and Math 110 or equivalent

525 Econometric Methods (3). Continuation of Economics 425. The major problems encountered in building and testing economic models are treated and alternative solutions to these problems are discussed. Major topics include corrections for heteroscedasticity and autocorrelation, maximum likelihood and BLUE estimation, simultaneous equations methods, probit and logit analysis and distributed lags. Other topics may include ARIMA or other series analytic methods, three stage least squares and dynamic multipliers or simulation. Work with econometric software is stressed. No programming experience necessary. Prerequisite: Economics 425 or equivalent (Economics 521 is highly recommended)

529 Readings in Quantitative Economics (3). Readings from the economic literature which stress advanced mathematical or econometric tools. A general subject matter is selected by the student with the consent of the instructor. Prerequisites: Economics 521, 525

531 Monetary Theory and Policy (3). A study of the nature and functions of money and the financial system, with emphasis on monetary theory and its application to current banking and financial problems; recent contributions to monetary theory and current literature. Prerequisite: Econ 301.

535 Theory of Public Finance (3). An inquiry into the scope and nature of economics with emphasis on the nature of the public sector including a brief study of welfare criteria along with the study of ability to pay, benefit theory of taxation, and expenditure theories.

537 State and Local Government Finance (3). This course investigates the role, problems and relative importance of municipal governments in the United States. Such areas as the demand for public services, tax and expenditure policies, and intergovernmental fiscal relations will be explored in detail. Case studies of state and local governments will be introduced to emphasize the problems and proposed solutions arising in modern municipal governments. Prerequisite: Economics 302.

538 Economic Policy (3). Analysis of the confluence of political and economic behavior, the economics of collective action. Prerequisites: ECON 301 and 302

540 Advanced International Trade (3). This course emphasizes the global allocation of resources and distribution of income under various commodity market conditions and government trade policies. Major topics include: comparative advantage; terms of trade; the distribution of gains and losses from trade; perfect vs. imperfect competition; tariffs, quotas and other barriers to trade; exchange rates and the balance of payments; preferential trading arrangements; international factor movements and multinational corporations. Prerequisites: Economics 302, or equivalent; graduate status.

542 Advanced International Finance (3). This course emphasizes the global activity and balance of payments implications of government taxation, expenditure and monetary policies under various capital market conditions.

Major topics include: exchange rates and the balance of payments; national income determination in an open economy; integrated and non-integrated capital markets; economic growth, stabilization policies and the quest for global economic stability.

548 Advanced Socialist Economic Systems (3). The course will deal with the theoretical analysis of socialist economic theory, Marxian and non-Marxian, and/or of socialist economics systems such as those of Eastern Europe, the Chinese mainland and elsewhere. The emphasis of the course will vary depending upon the instructor's design for the course. Prerequisite: Economics 301 and 302.

550 Regional Economics (0-3). The economics of spatial relations, emphasizing basic location and land utilization theory and the role of transport will be considered at the micro-level. Keynesian and neoclassical growth theories and contemporary policy approaches to regional growth and decline are analyzed. Prerequisite: Economics 302.

551 Advanced Institutional Theory (3). Evolution, organization and allocation functions of the modern industrial economy. Contributions and limitations of conventional economic concepts. Philosophical and theoretical interpretations of the economy in light of modern developments in philosophy and social science. Prerequisite: Economics 451

558 Advanced Urban Economics (3). The study of the city as a dynamic system of interrelated and interdependent markets. Significant markets in cities include land, housing, labor, transportation and public services.

560 Industrial Organization (3). The structure, conduct and performance of American industry. Historical evolution of American industry; alternative industrial systems, antitrust policies and their alternatives. Technological change and industrial performance. Prerequisite: Economics 301, 302.

565 Advanced Health Economics (3). This course is a critical review and evaluation of the economic analysis of medical markets. An emphasis will be placed on the critical evaluation of recent literature assessing health care systems and institutions, medical care spending, deman estimations for various types of medical services, demand estimation for medical insurance, analysis of medical care productions and costs, analysis of government policy for the deployment of health care resources. Prerequisites: Economics 465 or equivalent. Offered: Every Other Winter on Demand.

583 Racial Inequality & Public Policy (3). This course will provoke open debate and discourse about public policy responses to racial inequality. The emphasis is on stimulating participants to think about and to analyze critically the range of strategies offered for reducing racism and racial economic inequality. Offered: On demand

587 Human Resource Economics (3). An analysis of the factors determining the productivity of human resource: education, nutrition, job training and work environment. An analysis of work patterns, wage patterns, and the impact of automation. This course will be taught at the same time as Economics 487, the undergraduate Human Resource Economics. Graduate students will be assigned a specific research paper on a topic to be decided with the instructor. Prerequisite: Economics 302

589 Graduate Seminar in Labor Economics (3). Content of seminar will vary from semester to semester depending upon the instructor's design for the course. Prerequisite: Economics 486.

590 Special Topics (1-3). Selected topics in theoretical and applied economics. Prerequisite: Consent of instructor.

591 Research and Planning Seminar (3). The objective of this research seminar is to apply the quantitative techniques and theoretical constructs of economics to an urban-regional problem. Students are required to formulate and evaluate present economic models, and then complete a research project. Prerequisites: Economics 502 and 521

599 Research and Thesis (1-6). Directed specialized research.

601 Colloquium in Advanced Macroeconomics (3). The course will deal with analyses of topics in Macroeconomic analysis and Macroeconomic policies and investigation of current literature in divers areas of Macroeconomic analysis. A written report(s) will be made upon the selected assignment(s). Prerequisite: Economics 501 or equivalent.

602 Colloquium in Advanced Microeconomics (3). As a continuation of Economics 502, this course deals with the business enterprises-including production, costs, pricing, and investment-markets, market demand, market governance, general price-quantity models of the economy, microfoundations of the heterdox macroeconomics, and social welfare. Prerequisite: Economics 502

608 Topics in Economic Theory (3). This course deals with advanced topics in Institutionalist, Post Keynesian, and other heterodox econnomic theory. May be repeated with different topic. Offered on a 2 year cycle or on demand.

616 History of Economics in the 20th Century (3). The history of 20th century economics is concerned with a number of interdependent issues, including the institutional organization of economics at universities; the

historical development of the structures and social networks that make-up the economic paradigms of neoclassical economics, Marxian economics, Post Keynesian economics, and other heterodox economics; and the role of institutional and state power to maintain the dominance of the neoclassical paradigm. The aim of the course is to introduce students to this institutional/organizational history.

625 Colloquium in Econometrics (3). This course treats advanced topics in econometrics such as non-linear estimation techniques, model development, simultaneous equation estimation techniques, and simulation. Topics are developed from theoretical and application perspectives. Familiarity with personal computer is necessary. Prerequisite: Economics 521, Mathematical Economics or equivalent, Economics 525, Econometrics, or equivalent, Economics 501, Advanced Macro-economics or equivalent, Economics 502, Advanced Micro-economics or equivalent.

645 Financial Macroeconomics (3). This course will introduce the student to the central role of financial analysis in macroeconomic analysis and to theories of macroeconomics instability based on the integration of finance and macroeconomics. It will examine modern finance theory and modern approaches to financial analysis, paying particular attention to the contributions made by Fisher and Keynes. Offered: Fall 2000

660 Evolution of American Industrial Society (3). Drawing on economic and organizational theory, the course will concentrate on the evolution of American industrial technology, the American business enterprise, and the organization of American industries and markets since 1870.

665 Colloquim in Advanced Health Economics (3). This course is designed as a seminar with a special emphasis on analysis of econometric methods to assess issues in health care. The topics are developed from a theoretical and applied perspective. Familiarity with personal computers is necessary. Special emphasis will be given in the selection of course topics to the interests and backgrounds of participants. Prerequisites: Econ 565, 521, and 525 or their equivalents. Offered: Every other Winter on demand.

680 Teaching Methods and Course Design (3). This course is designed to prepare students for the challenge of teaching economics. Students will be taught how to write a syllabus; how to prepare for class; how to plan learning activities; how to become skillful in leading discussion; how to present an effective lecture; how to test and assess student learning; how to develop effective group projects; how to motivate their students for lifelong learning. Students will be required to design a course to be taught at the 200-, 300- or 400-level. It would be possible for the student to design an entirely new course, but it is hoped that the student will choose an existing course, which could then be taught as part of the ECON 681/682 requirement. The student will prepare a complete set of course materials, including a lecture outline, a list of require readings, useful handouts, course materials, including a lecture outline, a list of require readings, useful handouts, course assignments, exams, etc. The course should incorporate an interdisciplinary approach and should emphasize an "active learning" component, designed to promote a "rich learning experience." The student will work closely with an appropriate member of the faculty. Prerequisite: Must have completed/passed Comprehensive Exams Offered: Every Fall

688 Colloquium on Political Economy (3). This course is designed as a seminar and will take into account theory and policy analysis from alternative perspectives. The topics covered will include philosophical foundations of contemporary theory and policy, the organization of production information and finance, resource and environment, wealth and income distribution, public and private policy and planning. Stress is placed on contemporary research and students are expected to become involved in research projects.

690 Special Doctoral Readings in Economics (1-3). Special research topics in Economics at the Doctoral level.

699 Doctoral Dissertation (1-12). Directed selected research for Economics in the interdisciplinary doctoral program.

Department of English Language and Literature

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Mailing Address

University of Missouri-Kansas City Department of English Language and Literature CH 106 5100 Rockhill Road Kansas City, MO 64110-2499

Interim Department Chair:

Karen Vorst

Professors Emeriti:

Robert M. Farnsworth, Daniel F. Jaffe, James McKinley, David Ray, Lois Spatz, Linda Voigts, David Weinglass, Robert Willson

Associate Professors Emeriti:

Ralph Berets, James A. Reeds, Jonas Spatz Professors:

Joan F. Dean, Moira Ferguson (Martha Jane Starr Phillips/Missouri Distinguished Professor of Women's and Gender Studies), Thomas Stroik (principal undergraduate adviser)

Associate Professors:

Michelle Boisseau (coordinator, creative writing; associate editor, BkMk Press), Stephen Dilks (director, composition), Jane Greer, Daniel Mahala (director, Council on Reading and Writing), Barbara Ryan

Assistant Professors:

Kimberly Banks, Virginia Blanton, Laurie Ellinghausen, Daniella Mallinick, Jennifer Phegley (principal graduate adviser), Michael Pritchett, Jeffrey Rydberg-Cox, Robert Stewart (editor, New Letters/BkMk Press), George Williams

Full-time Lecturers:

Melanie Burdick, Sheila Honig, Maureen Maginn

Department Description

The Department of English Language and Literature offers programs of study that lead to the bachelor of arts and the master of arts degrees. In the undergraduate program, students may pursue a general English program, or they may choose an emphasis in creative writing or secondary English education. Two English minors are offered to students majoring in other disciplines. English is an academic discipline eligible for full participation in the University's Interdisciplinary Ph.D. program. See the School of Graduate Studies section of this catalog for more information.

The department includes faculty who have a broad range of professional competence in the study of literature and language, and who are trained to teach courses in British and American literature, linguistics, American culture, film, creative writing, and composition. The department believes the study and teaching of literature and language to be an important means of preserving and vitalizing our humanistic tradition.

Special Resources

Publications

The department and the College of Arts and Sciences publish *New Letters*, a continuation of *The University Review*, which

for over 50 years published the works of new and distinguished writers. *New Letters* continues to provide a medium for the best imaginative writing available.

The English Language and Literature Department sponsors the publication of *Number One*, a magazine of student poetry and fiction, and *The Sosland Journal*, a collection of award-winning student essays from the Ilus W. Davis contest.

BkMk Press, operated under the auspices of the College of Arts and Sciences and housed in the department, publishes books of high-quality poetry and prose by professional writers.

Greater Kansas City Writing Project

The English Language and Literature Department, in conjunction with several local school districts, sponsors the Greater Kansas City Writing Project (GKCWP), a graduate in-service program for teachers of writing (K-14). This program consists of summer graduate credit workshops and school district in-service sessions throughout the school year. The GKCWP is an official National Writing Project affiliate.

Related Information, Opportunities and Conferences

Students preparing for a career in journalism should seek experience with the *University News* and apprentice programs offered by *The Kansas City Star* and other regional communications firms.

The English Language and Literature Department offers courses and an annual conference for English teachers as part of its continuing education function. It also sponsors a writers' reading series, two summer creative writing workshops (the Mark Twain Workshop and the *New Letters* weekend Writers Conference), and annual contests for the Barbara Storck Poetry and Short Story Award and the Ilus W. Davis Award in Expository Writing. The department sponsors additional scholarships for creative writers in the names of former students: Mbembe, Gary William Barger and Crystal Field.

Career Implications of the Graduate English Degree

In addition to teaching and writing careers, English graduates with writing and editorial skills find that they are desirable candidates for positions in businesses where effective communication and written evaluation are required.

Advising System

All graduate English students are assigned an adviser upon their admission to the program.

Master of Arts: English

The Department of English offers three 33-hour programs of study leading to the master of arts in English. Through courses in English and American literature, creative and expository writing, film, linguistics, composition/rhetoric and literary criticism, these programs of study are designed to prepare students for teaching, research, and writing careers, for editorial careers, and for further study at the doctoral level.

The English literature M.A. is designed for students desiring a general background in English and American literature and is strongly recommended for students planning further graduate study in English and/or American literature.

The English language and literature M.A. is designed for students who wish to combine graduate study of literature with the study of linguistics and/or composition and rhetoric. This M.A. is recommended for students interested in teaching in the community college or the secondary school and for students interested in pursuing the Ph.D. in composition and rhetoric or linguistics.

The M.A. in English with a creative writing emphasis area is designed for students who want training in creative writing. Students elect one of two concentrations: poetry and prose. Since up to two writing courses can be taken in other departments, the creative writing emphasis can be an interdisciplinary experience.

Advisers are assigned to new students at the time of their admission to graduate study. New graduate students should meet with their advisers as soon as possible to prepare an official program of study.

Admission Requirements

The application process is competitive. Satisfying the admission requirements does not guarantee admission to the program.

- Completed application to the University;
- Completed Application for Admission to English Graduate Studies;
- B.A. in English, or a B.A. degree that includes at least 30 hours of sophomore-, junior-, and senior-level English courses, or the equivalent. Applicants with fewer than 30 hours of undergraduate English courses, may be admitted and assigned additional coursework as part of their program. These extra hours are added to the 33 hours needed for graduation;
- 3.0 cumulative grade-point average and a 3.0 average in English coursework. In unusual circumstances, the principal graduate adviser may consider applicants with lower grade-point averages;
- 60 percent or higher score on the verbal aptitude portion of the GRE (Graduate Record Exam), or 60 percent or higher on the GRE Subject test, or 60 percent or higher on the Major Field Test in English;
- Writing Sample. The writing sample is expected to demonstrate the applicant's writing abilities. For an M.A. in literature or composition/linguistics, a recent academic paper up to 15 pages long is required. For the creative writing emphasis area, submit creative work in your area of concentration (6-10 poems; 20-30 double-spaced pages of fiction). Creative writing applicants who are applying for graduate assistantships are also urged to submit a sample of their scholarly writing;
- Statement of Purpose. In a typed essay of 400 to 500 words, applicants should describe their academic and professional objectives, discussing in detail their interest in their emphasis area, and their research or writing in the area. If applicants are applying for teaching or research assistantships, they should also describe their strengths and qualifications for teaching and/or research;
- Three letters of recommendation: evaluations of the applicant's readiness for graduate study by three professors or others who know the applicant's readiness for graduate study and who know the applicant's abilities and potential well.

Admissions decisions are made by the principal graduate adviser in consultation with the faculty.

The application deadline for admission and for Graduate Teaching or Graduate Research Assistantships is February 15 for Fall Semester and October 15 for Winter Semester. Students whose applications do not meet the above deadlines can be admitted only provisionally and may not take more than 6 hours before entering the program as a "fully admitted" student.

Degree Requirements

In addition to the department requirements below, graduate students in English must comply with the requirements listed in the General Graduate Academic Regulations and Information section of this catalog.

General Requirements for the M.A. in English

- Students must earn 33 graduate credits beyond the bachelor's degree, of which at least 15 hours must be at graduate level (courses numbered 500 and above) and taught by a member of the graduate faculty and at least 9 hours must be in 500-level seminars or other 500-level courses which are not cross-listed with 400-level courses.
- Students must maintain a 3.0 (B) grade-point average to remain in the M.A. program and to complete the degree. Students are advised that grades of I (incomplete) convert to an F within one year.
- Students must fulfil a foreign language requirement by satisfactorily completing (with a C or better) two years of the same foreign language or by completing satisfactorily the final exam of a second semester language course.
- Students must remain continuously enrolled, except in summer, for a minimum of 1 credit hour per semester.
- Students must complete a formal Program of Study and have it signed within a year after admission.
- Students must complete all coursework within seven years.

Specific Requirements for the M.A. in English

Literature M.A. Requirements

Students are required to take at least one course from each of the following seven areas, including one class in American literature:

- I. Criticism and Scholarship English 447/547, 500, 550G, 555G
- II. Language and Rhetoric English 400CH, 445/545, 470, 520, 550J, 550M, 555J, 555M
- III. Literature Through the Middle Ages English 400CF, 412/512, 422/522, 452/552, 503, 550A, 550R, 555A
- IV. Renaissance Literature English 400CA, 413/513, 414/514, 423/523, 451/551, 452/552, 461/561, 481/581, 550B, 555B, 555R
- V. Late 17th- and 18th-Century Literature English 415/515, 426/526, *455/556, 462/562, 482/582, 550C, 555C
- VI. Nineteenth-Century Literature English **410/510, 416/516, 418/518, 425/524, **440/540, 455/556, 483/583, 550D, 550E, 555D
- VII. Twentieth-Century Literature English **410/510, 417/517, 427/527, 428/528, **440/540, 453/553, 463/563, 465/565, 550F, 555E, 555F

*Satisfies 18th- or 19th-century requirement, depending on the content.

**Satisfies 19th- or 20th-century requirement, depending on the content.

Other courses in the catalog may satisfy an area requirement if the content is appropriate, e.g., English 550H/555H Graduate Seminar: Studies in Fiction.

Language and Literature M.A. Requirements

• At least 12 hours selected from the following list of courses: English 445/545, 447/547, 470, 519, 520, 550G/555G, 550J/555J, 550M/555M, and 550P. For students interested in teaching in the community college or secondary school, or in pursuing a Ph.D. in

composition and rhetoric, English 519 is highly recommended (it is required for graduate teaching assistants).

• At least one course from each of the remaining areas, III.-VII. outlined above in the Literature Emphasis Area.

Creative Writing Emphasis Requirements

- 12-15 hours of English and American literature. Students are urged to take literature courses in the genre in which they plan to write their final portfolio.
- At least 15 hours in 400- and 500-level writing courses, primarily in the genre in which one plans to submit one's final portfolio. English 532 (Advanced Creative Writing Prose) and 535 (Advanced Creative Writing Poetry) may be repeated for credit.
- Up to 6 hours may be in the departments of Communication Studies or Theatre (as long as other courses outside the department have not been credited toward graduation).
- Three hours for completion of the Creative Writing Portfolio (English 599: Research and Thesis) at the end of the student's last semester (or, under special circumstances, summer session). The portfolio will consist of the student's own writing and will be expected to contain new work created for the portfolio, and may contain earlier work done for classes or outside of class. The portfolio will be evaluated by a Portfolio Assessment Committee, consisting of the student's 599 professor, a member of the creative writing faculty, and a member of the literature faculty. (The 599 professor can be a creative writing, communication studies, or theatre faculty member.) The student must submit the portfolio to the full committee by the 13th week of classes of the final semester, and it must be approved by the student's full committee before the last day of classes. Typically, the portfolio consists of:
 - 1. 40 pages of poetry, or
 - 2. 75 pages of fiction or creative nonfiction, or
 - 3. Two one-act plays or one full-length play, or
 - 4. Two short-feature screenplays, or one full-length screenplay.

Note: Students are expected to include in their portfolio some new work, done outside of class and submitted only to the portfolio committee.

The portfolio will meet all applicable bibliographical guidelines customary for the submission of work in the chosen genre. A brief introduction may be included if the student desires to place his or her work in a historical or other context, or desires to explain some aspect of the work. After approval, the student is to have one copy bound for archival purposes, and presented to the department for preservation.

If the committee decides that the portfolio fails to meet the expected standards, the student has the option of resubmitting the portfolio in another semester. A portfolio may not be submitted a third time until the graduate committee reviews the record and determines when the next attempt should be made. In the event of a third failure, the graduate committee, after a further review, may decide to require additional coursework or writing work before the candidate may resubmit the portfolio.

Interdisciplinary Ph.D. Program

English is an academic discipline eligible for full participation in UMKC's Interdisciplinary Ph.D. program. Students interested in this study should review the School of Graduate Studies section of this catalog for general and discipline-specific admission criteria, academic regulations, and degree requirements. Interested students should contact the department's doctoral program adviser.

Assistantships, Internships and Other Opportunities

The department offers a limited number of graduate teaching and research assistantships on a competitive basis to those students whose applications are judged by the graduate committee to be worthy of additional responsibilities. Applications for teaching and research assistantships are considered in February, for the following Fall; however, at times a research assistantship may be available for the Winter Semester, and the graduate committee will consider applications in October. Graduate teaching assistantships may be awarded to students who demonstrate readiness to become teachers in freshman- and sophomore-level English courses. Graduate teaching assistants are closely supervised and are required to participate in training activities before the Fall Semester begins and throughout the year. Graduate research assistantships may be awarded to students who demonstrate a strong ability to work independently assisting faculty members in research, teaching, and other duties.

Through the resources of the metropolitan media, as well as the on-campus facilities of the national literary journal *New Letters* and literary publisher BkMk Press, students may gain experience in writing and editing. With the approval of the supervising faculty, students may intern with these on-campus media for credit and also may serve on the staff of the student literary journal, *Number One*.

English Courses

500 Introduction to Graduate Study in English (3). Introduction to the kinds of scholarship related to the study of literature: (1) establishment of text: analytical bibliography and editing problems; (2) use of the library: familiarity with major reference tools including professional journals, microform and books.

501 Magazine Editing (3). A course combining academic study of editorial management, publishing operations and language skills, with "hands on" experience in article evaluation, editing, magazine production and legal matters such as copy right and libel. Class work concentrates on authentic and effective language use, with attention given to copy editing, grammar, typography, printing processes, financing and distribution, for commercial and small-press publications.

502 Magazine Nonfiction (3). This course emphasizes the origination and execution of nonfiction magazine articles for a variety of publications. Special attention is given to successful queries, and the various writing techniques required for different kinds or articles. Students learn re-structuring and revision and the legalities affecting writers. Students are expected to complete three publishable articles.

503 Old English (3). Study and the reading of Old English of a wide range of Old English prose and poetry, beginning with less difficult works and terminating with Beowulf.

504 Radio and Television Writing (3). A course in how to write scripts, both dramatic and comic, for radio and television. Special emphasis is placed on the genesis and continuation of the radio and television series. Principles of dramaturgy for broadcast media are also stressed. Students are expected to write at least one broadcast play, and the pilots for at least three series. Attention will also be given to the marketing of broadcast scripts and to local production of their writing.

508 Harlem Renaissance (3). This course examines the period from 1920 to 1940, known as the Harlem Renaissance, a time of unprecedented literary and cultural creativity by Black artists. This course explores a variety of cultural productions, not only traditional forms of literature such as novels, short stories, plays and poetry, but also nonliterary objects of study such as painting, sculpture, and music. Offered: On demand

510 Black Women Writers (3). This course explores the writings of African American Women Writers. The course examines how these writers have interacted with and often revised stereotypical representations of African American womanhood typically found within canonical and African American male literatures. The course will examine literature (which might include

fiction, poetry, autobiography, and drama) of the nineteenth and twentieth centuries; the majority of the works will be by modern and contemporary authors such as Nella Larsen, Zora Neale Hurston, Toni Morrison, and Terry McMillan. By placing the works in this sort of cultural and historical context, it will be possible to examine the unique tradition of African American women's writings as well as individual texts.

512 Chaucer (3). Readings from Chaucer's most important works, especially "The Canterbury Tales" and "Troilus and Criseyde" with emphasis on them as types of medieval genres and on the Middle English language. Students will make in-class presentations and submit papers requiring research and bibliographical work.

513 Renaissance Literature I (3). English literature from the time of Wyatt and Surrey to the beginning of the 17th century, including the works of Spenser, Marlowe, Sidney, Shakespeare and others. Students will make in-class presentations and submit papers requiring research and bibliographical work.

514 Milton (3). A study of Milton's prose and poetry, with special attention to "Paradise Lost". Students will make in-class presentations and submit papers requiring research and bibliographical work.

515 Restoration and Early 18th-Century British Literature (3). British literature from the late 17th century to the mid 18th cetury. Selected writers may include Addison and Steele, Behn, Congreve, Defoe, Dryden, Finch, Pope, Rochester, Swift, and Wortley Montagu.

516 The Romantic Period (3). An extensive study of selected writers (such as Austen, Barbauld, Byron, Coleridge, Hazlitt, Hemans, Keats, Gilpin, the Shelleys, Wollstonecraft, and Wordsworth) organized around literary themes and/or cultural issues important to the Romantic period. Prerequisite: English 327 or permission of the instructor. This prerequisite applies only to undergraduate students.

517 Modern Poetry (3). Study of works by modernist poets such as Hopkins, Yeats, Frost, Stevens, Williams, Moore, Pound, H.D., Eliot, Millay, Hughes. Students will make in class presentations and submit papers requiring research and bibliographic work.

518 19th-Century American Literature (3). An intensive study of either selected major American writers in the 19th Century or of 19th-Century literary movements. Students will make in class presentations and submit papers requiring research and bibliographical work.

519 Problems in Teaching English (3). This course focuses on issues related to the teaching of English at the high school and college levels, with an emphasis on the teaching of writing. Issues addressed may include assignment design, teaching invention and revision, response to and evaluation of writing, collaborative learning, relationships between reading and writing, classroom uses of electronic media, and institutional contexts within which teachers work. The course is required of Teaching Assistants in the UMKC Composition Program, to be taken either prior to or concurrently with their first semester of teaching. Secondary English teachers and others interested in English teaching are also welcome.

520 Greater Kansas City Writing Project (3). Studies in methods and objectives for the teaching of English with special attention to secondary school teaching.

522 Medieval Literature (3). Western religious and secular verse and prose, to the 15th-century. Late Middle English works are read in the original; all other selections in translation. Students will make in-class presentations and submit papers requiring research and bibliographical work.

523 Renaissance Literature II (3). English literature from 1600 to the beginning of the Restoration, including the works of Donne, Jonson, Milton, and other contemporaries. Students will make in-class presentations and submit papers requiring research and bibliographical work.

526 The Victorian Period (3). An intensive study of selected writers (such as Arnold, Braddon, the Brontes, the Brownings, Dickens, Darwin, Eliot, Gaskell, Hardy, Ruskin, and the Rossettis) organized around literary themes and/or cultural issues important to the Victorian period. Prerequisite: English 327 or permission of the instructor. This prerequisite applies only to undergraduate students.

527 Contemporary Poetry (3). Study of works by contemporary poets (post World War II), such as Auden, Bishop, Hayden, Berryman, Rukeyser, Larkin, Rich, Plath, Heaney, Boland, Komunyakaa. Students will make in class presentations and submit papers requiring research and bibliographic work.

528 20th Century American Literature (3). Major American writers or literary movements of the 20th-century. Students will make in-class presentations and submit papers requiring research and bibliographical work.

529 Screenwriting II (3). This advanced screenwriting course should allow students to complete a rough draft of a screenplay that they have begun in another course or on their own. It can also be used as a course in which a play or short story is transformed into a screenplay. Students are expected to be

familiar with screenwriting techniques and formats and with cinematic concepts before they enroll in this course. Prerequisite: English 429 or permission of instructor.

531 Late 18th-Century British Literature (3). British literature from the mid to late 18th century. Selected writers may include Blake, Burney, Collins, Equiano, Fielding, Gray, Johnson, Sheridan, and Wollstonecraft.

536 Poetic Forms (3). An advanced creative writing course that focuses on intensive study of and practice in metrics and traditional and nonce forms. May be repeated once for credit. Prerequisite: English 315 or its equivalent

537 Prose Forms (3). This course covers techniques for planning and drafting major prose forms. Students will learn how to use content as a guide to inventing new forms (i.e. novella, novel, linked-story collection, episodic novel, essay novel, and creative nonfiction book. Prerequisites: English 432/35 Adv CW Prose/Poetry Offered: Winter

540 American Culture (3). Texts that offer perspectives on key historical themes of American culture. Texts may be grouped around any culturally significant principle (e.g. region, race, gender, class, ethnicity, religion) or theme (e.g. the mythology of the frontier, marriage and domesticity, the American Dream). Students will make in-class presentations and submit papers requiring research and bibliographical work. Offered: On demand.

541 Girls and Print Culture (3). This course deals with girl's relationships to the continually evolving print culture. Students will examine various literary representations of girlhood by adult writers, explore texts directed at girls (e.g., conduct books, periodicals, textbooks), and study the writing and reading practices of girls themselves. Offered: On demand

545 History and Principles of Rhetoric (3). A study of selected writings of ancient and modern rhetoricians illustrating key issues in the development of Western discourse theory and practice. Issues examined include the relationships between rhetoric and knowledge, orality and literacy, and rhetoric and poetics. Attention will also be given to the implications of rhetorical theory for modern language instruction. Students will make in-class presentations and submit papers requiring research and bibliographical work.

547 Introduction to Literary Criticism (3). An introduction to major schools or methods of literary criticism. The first third of the course is an historical overview of criticism from Aristole to Northrup Frye. The remainder of the semester is devoted to a study of genetic, formalist, mimetic, affective, intertextual, and deconstructionist approaches. Students will make in-class presentations and submit papers requiring research and bibliographical work.

550 Graduate Seminar (3). Authors, works and intellectual currents which form the basis of these seminars may vary from semester to semester, depending upon the instructor's design for the course. May be repeated for credit. Composition & Rhetoric Course 550 covers the first halves of periods which naturally fall in two parts. Continued in English 555.

550A Graduate Seminar Medieval Literature I (3).

550B Graduate Seminar Renaissance Literature I (3).

550C Graduate Seminar Neo-Classical Literature I (3).

550D Graduate Seminar 19th Century Literature I (3).

550E Graduate Seminar American Literature I (3).

550F Graduate Seminar Modern Literature I (3).

550G Graduate Seminar Literary Criticism (3).

550H Graduate Seminar Studies in Fiction I (3).

550I Graduate Seminar in Dramatic Literature I (3).

550J Graduate Seminar: History of the English Language (3).

550K Graduate Seminar: Creative Writing Prose (3).

550M Graduate Seminar in Rhetoric and Composition (3).

550P Graduate Seminar: Sociolinguistics and Dialectology (3). Seminar focusing on the role of social factors in language use, and on the origin and development of regional and urban dialects in English. Special attention will be paid to sociolinguistic motivations for change, variation and merger in dialects and languages in contact, and Black English. Offered: On demand.

550R Seminar in Comparative Literature: Pre-Eighteenth Century (3). This course will focus on representative works, authors, periods or genres from ancient and/or European literature prior to the eighteenth century.

551 Shakespeare Comedies and Histories (3). A study of Shakespeare's major comedies and history plays with special emphasis on his dramatic works before 1600. Students will make in-class presentations and submit papers requiring research and bibliographical work.

552 Early English Drama (3). English religious and secular drama prior to Shakespeare. Mystery and morality plays are studied with emphasis on their literary and social backgrounds. Close readings of such works as "Everyman", "The Wakefield Second Shepherd's Play" and "The Spanish Tragedy." Students will make in-class presentations and submit papers requiring research and bibliographical work.

553 Modern Drama 1880-1945 (3). A study of modern drama: Continental, British, and American, including history and development, critical theory, and literary evaluation. This course will focus on the earlier modern playwrights from Ibsen and Shaw, with special attention to naturalism. Students will make in-class presentations and submit papers requiring research and bibliographical work.

555 Graduate Seminar (3). See description English 550. Course 555 covers the second halves of periods which naturally fall into two parts. May be repeated for credit.*

555A Graduate Seminar Medieval Literature II (3).

555B Graduate Seminar Renaissance Literature II (3).

555C Graduate Seminar Neo-Classical Literature I (3).

555D Graduate Seminar in 19th Century Literature II (3).

555E Graduate Seminar American Literature II (3).

555F Graduate Seminar in Modern Literature (3).

555G Graduate Seminar Literary Criticism (3).

555H Graduate Seminar Studies in Fiction II (3).

555I Graduate Seminar in Dramatic Literature II (3).

555J Graduate Seminar English Language (3).

555K Graduate Seminar in Creative Writing:Poetry (3).

555M Graduate Seminar: Composition (3).

555N Graduate Seminar: Prose Fiction (3).

555R Seminar in Comparative Literature: Post-Eighteenth Century (3). This course will focus on representative works, authors, periods or genres of European or world literature from the eighteenth century to the present.

556 Studies in the Novel 1740-1900 (3). An intensive study of no more than three major novelists of the eighteenth or nineteenth century. The content of the course will change, depending on the instructor. Students will make in-class presentations and submit papers requiring research and bibliographical work.

561 Shakespeare-Tragedies and Romances (3). A study of Shakespeare's major tragedies and late romances with special emphasis on his dramatic literature after 1600. Students will make in-class presentations and submit papers requiring research and bibliographical work.

562 Restoration and 18th Century Drama (3). The drama after the restoration of the monarchy and the reopening of the theatres through the 18th-century. Special emphasis is placed on the comedy of manners and the heroic drama in the Restoration and the sentimental comedy in the 18th-century. Includes such playwrights as Dryden, Congreve, Etherege, Wycherley, Steele, Lillo, Cumberland, Sheridan, and Goldsmith. Students will make in-class presentations and submit papers requiring research and bibliographical work.

563 Contemporary Drama (3). A study of contemporary drama: Continental, British, and American, including history and development, critical theory and literary evaluation. This course will focus on the more recent writers, including the absurdists, with special attention to experimental drama. This course is a continuation of English 453. Students will make in-class presentations and submit papers requiring research and bibliographical work.

565 Studies in Modern Novel (3). An intensive study of no more than three major twentieth century novelists. The content of the course will change depending on the instructor. Students will make in-class presentations and submit papers requiring research and bibliographical work.

566CA Cluster Course: Images of the Human Body in Renaissance (3). Focusing on Renaissance conceptions of the human body, this cluster treats the following topics as they are reflected in Renaissance literature, art, astrology, astronomy, biology, anatomy, medicine, and politics: A) The dignity of the human body B) Microcosm and macrocsm C) The human body and the heavens D) Stranger manifestations: freaks and beasts E) The humors F) Disorders of the human body G) The body politic H) The human body as an object of study

566CF Cluster Course: Courts and Culture in the High Middle Age (3). This cluster course links history and English in a study of royal courts from the 11th, 12th, and 13th centuries, considering the political and cultural issues associated with each court and reading the literature. The first point of common focus will be the 11th-century court of William the Conqueror (1066-87), Norman duke and English monarch, a ruler who represents both the last movement of Scandinavian expansion and the beginnings of a feudal monarchy. The second focus will be on Henry II of England (1154-89), whose court exemplifies religious-secular tension in the Becket controversy and the patronage of thinkers like John of Salisbury. Two courts from the 13th century will be studied, the first that of Fredrick II (1215 -50), and the second that of Louis IX of France (1226-70).

591 Research in Selected Fields (1-3). Individual study under the direction of a senior member of the department, leading to the writing of a formal or

scholarly paper. Enrollment through approval forms in English Department. May be repeated for credit.

599 Research and Thesis (1-9). A student, with permission of the graduate committee, may write a thesis for 3 hours credit.

600 Introduction to Doctoral Study in English (3). Introduction to research skills necessary for doctoral work, particularly for writing the thesis; attention will be paid both to traditional skills such as bibliography and to computer skills.

650 Doctoral Seminar (3).

691 Doctoral Research in Selected Fields (3). Individual study under the direction of a senior member of the department leading to the writing of a formal or scholarly paper. May be repeated for credit.

699 Research and Dissertation (1-15). Research and preparation for doctoral dissertation.

Department of Foreign Languages and Literatures

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Professors:

Patricia P. Brodsky

Associate Professors:

Louis Imperiale, Kathy M. Krause, Gayle Levy, Alice R. Reckley Vallejos

Assistant Professors:

Kenneth Scott Baker, Rebecca L. Lee

Department Description

The Department of Foreign Languages and Literatures offers programs of study leading to the bachelor of arts degree in French, German and Spanish and graduate-level work leading to a master of arts in Romance languages and literatures (French, Spanish). In addition, undergraduate minors are offered in French, German and Spanish.

Language instruction also is offered in Arabic, Chinese, Greek, Hebrew, Italian, Latin and Russian.

Career Implications

Aside from pursuing teaching careers, holders of degrees in foreign languages are in demand by government, the media and international business in growing numbers, as the need for increased sophistication and expertise in international affairs continues to expand. Multinational companies and organizations now view foreign language skills as an asset to the prospective employee. In the past 10 years this notion has become widespread in such areas as business, industry, commerce, civil service, education, law, communications media and the health services. The changing conditions of international economics, politics and communications indicate that this trend will continue.

Higher Educational Applications

Reading knowledge of a foreign language is a requisite for many graduate degrees. Foreign language proficiency, moreover, is gaining increasing importance on all levels of university instruction as curricula are internationalized. Scholars and professionals in many fields have long recognized the need for, and advantages of, foreign language competency for improved international communication and effective conduct of basic and applied research.

Special Resources

Study Abroad

UMKC has exchange and study agreements with other institutions in many parts of the world. Students have an

opportunity to spend a year of study at the University of Seville in Spain or the University of Lyon II in France. Year or semester programs are possible at the University of Klagenfurt in Austria and the University of Veracruz in Xalapa, Mexico. Summer programs are held at the University of Veracruz, Mexico; the University of Granada, Spain; and the University of Lyon II, France.

The department encourages students to travel and study abroad by participating in any of the summer programs sponsored by accredited American universities. It should be noted, however, that the department must approve in advance any courses taken abroad for major or graduate credit. Interested students should contact the appropriate departmental adviser.

Language Resource Center

A modern facility housing audio, video and computer equipment and software is located in 109 Scofield Hall. The purpose of the lab is to supplement and support in-class foreign language learning. Tutoring services for students of foreign language are provided on a limited basis. First-year language students are encouraged to use the Language Resource Center.

Master of Arts: Romance Languages

The master of arts degree program provides necessary training in French or Spanish language and literature for those who want to teach those languages at the secondary school or junior college level. It also serves students who plan to continue with studies at the doctoral level. Other employment opportunities can be found in government; business and industry; publishing houses; foundations; etc.

Admission Requirements

A bachelor's degree from an accredited institution with a 3.0 (B) grade-point average in the subject area and a 2.75 overall GPA is required for admission.

The Graduate Record Examination (Advanced Achievement) is recommended, and two letters of recommendation are required. Students' transcripts with accompanying data are carefully evaluated.

Applicants with inadequate preparation may be required to make up deficiencies by taking more than the standard 30 hours of coursework.

Courses taken prior to admission into a graduate program will not count for graduate credit.

Requirements for Retention

If students' graduate grade-point averages fall below 3.0 (B), they may take coursework only on the 300 and 400 levels until a 3.0 graduate grade-point average has been achieved. Coursework completed under this condition will not count toward the master's degree.

Transfer Credit

No more than 9 hours of transfer credit are normally allowed toward degree requirements.

Advising

Students interested in pursuing a master's degree in Romance languages should meet with the appropriate principal graduate adviser before beginning studies:

French: Kathy M. Krause

(816) 235-**1340**, krausek@umkc.edu

Spanish: Louis Imperiale

(816) 235-2822, imperialel@umkc.edu

In consultation with the adviser, a course of study will be planned listing the courses that will satisfy requirements for the degree. Prior to registration each semester, candidates must meet with their advisers for approval of their course programs. They also must seek their adviser's endorsement whenever a change in the agreed course of study is necessary.

M.A. Degree Requirements

- 1. The program of study consists of 30 hours with a minimum of 18 hours at the 500 level and a maximum of 12 hours on the 300 and 400 levels. A minimum GPA of 3.0 is required in all graduate work. It is highly recommended that students take courses in as many areas, genres and periods as possible in order to achieve both breadth and depth of knowledge. Students must obtain approval of their study programs by the graduate adviser before each term.
- 2. Students must demonstrate ability to read, speak and write, idiomatically and with accuracy, the language in which the M.A. degree is being pursued.
- 3. Final Examination: Spanish students must take a final written examination covering the coursework taken for the degree; French students must take a final oral examination.
- 4. Second Language Proficiency: In addition to the mastery of the target language, students must demonstrate a reading knowledge of a second language in one of the following ways:
 - Taking a reading examination in French, Spanish, Italian, German or Latin administered or approved by the department or given by the Educational Testing Service.
 - Achieving a grade of 3.0 (B) or better in a 3-hour 200-level language course.
 - Achieving a grade of 2.0 (C) or better in each of two 300-level courses or in one 400-level literature or civilization course.

Foreign Language Courses

899 Required Graduate Enrollment (1).

French Courses

512 17th-Century French Literature (3). Selected readings in the literature of the 17th century, with an emphasis on non-dramatic works. Also offered as French 412. Prerequisites" Admission to M.A. in Romance Languages and Literature program or permission of instructor.

513 18th-Century French Literature (3). Emphasis on philosophical and social significance. Authors may include Marivaux, Beaumarchais, LeSage, L'Abbe Prevost, Montesquieu, Rousseau, Diderot. Also offered as French 413. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

514 Medieval Literature (3). Selected readings in various genres including epic, romance, theater and lyric. Emphasis will be placed on the intertextual relations and the cultural and historical context surrounding text production in the Middle Ages. Also offered as French 414. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

517 16th-Century French Literature (3). Selected readings in prose and poetry from Marot through Astree. Authors may include Rabelais, Ronsard, du Bellay, Montaigne, Marguerite de Navarre. Also offered as French 417

520 Non-Dramatic 17th-Century French Literature (3). Evaluation and reading of the works of Malherbe and contemporaries, of Descartes and Pascal and contemporaries, and of the great authors at the height of the classical period.

524 19th-Century French Literature (3). Selected readings in various genres from Romanticism through symbolism. Also offered as French 424.

526 20th-Century French Literature (3). Selected readings from the Belle Epoque to the contemporary period. Also offered as French 426.

531 Racine (3). Seminar on the career and work of Jean Racine. Study of 17th-century dramaturgy and individual research on particular plays.

533 Voltaire (3). Seminar on Voltaire and his place in the French Enlightenment. Also offered as French 433.

534 Diderot (3). Seminar on Diderot and the Encyclopedie and their contributions to the French Enlightenment. Also offered as French 434.

535 Rabelais (3). An extensive study of Rabelais and his place in Renaissance thought.

536 Moliere (3). Moliere's theater with emphasis on the interrelationship of the plays.

540 Medieval Romance (3). The various movements of French medieval romance from the 12th through 15th centuries with an emphasis on the 12th and 13th centuries. Analysis of literary technique and socio-historical context will be stressed. No knowledge of Old French is assumed. Also offered as French 440. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

544 Renaissance Poetry (3). French Poetry from the Grand Rhetoriqueurs through the Pleiade. Study of poetic forms, major poets and schools, and different approaches to analyzing poetry. Also offered as French 444. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

545 Epistolarity and the Novel (3). Explorations of the genre through the analysis of 17th- and 18th- century French novels. Introduced by a theoretical review. Also offered as French 445. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

546 17th-Century French Drama (3). The classical period: Emphasis on Corneille, Racine and Moliere. Also offered as French 446. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

547 19th-Century French Poetry (3). The study of the poetry and dominant poetic movements of the 19th century, with special attention given to different approaches to its analysis. Also offered as French 447. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

548 20th Century French Theater (3). Analysis of major currents of French theater of the 20th Century, with emphasis upon the postwar period and its movements. Also offered as French 448.

552 Medieval Poetry (3). A study of medieval poetry including religious and secular poetry, Provencal and Old French lyric, the influence of poetry in other genres such as romance and theater, later medieval poetry of the 14th and 15th centuries, as well as a discussion of the origins of the lyric. Also offered as French 452. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

554 The Intellectual Origins of the French Revolution (3). Study of philosophical and political texts by Montesquieu, Rousseau, Voltaire, Diderot, etc. on government, society, language, freedom and equality. Critical study of the Enlightenment. Also offered as French 454. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

555 Fin-de-Siecle and Belle Epoque (3). Study of the literary, cultural and historical context of this time period in French history, for example: Symbolism, Decadence, and the years 1900-1914. Also offered as French 455. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

556 20th-Century French Poetry (3). The study of 20th-century poetry with special consideration given to different approaches to its analysis. Also offered as French 456. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

561 20th Century French Narrative (3). The analysis of major currents in French 20th-century narrative, especially fiction and film. Courses will be organized around narrative themes or historical events and will include social and cultural components. Also offered as French 461. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

563 19th-Century French Fiction (3). Studies in the birth, development, and variation of French Romanticism. Readings include de Stael, Senancour, Constant, Hugo, Stendhal and Merimee. The advent of realism and naturalism in France. Readings include Balzac, Flaubert, Daudet, De Maupassant, and Zola. Also offered as French 463. On demand.

568 French Literature Between the World Wars (3). A study of the major works of French literature from 1919 to 1939. Also offered as French 468.

570 Studies in Critical Thought (3). Various currents of 20th-century literary criticism and their political and historical contexts. Also offered as French 470. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

571 Autobiography (3). Analysis of autobiographies and autobiographical texts such as diaries and memoirs together with theoretical texts on the genre. The concentration of different periods or issues may change from semester to semester, i.e. the art of autobiography as practiced by 20th-century writers, especially women. Also offered as French 471. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

572 Francophone Studies (3). Study of different national Francophone literatures. Reading may include writers from Quebec, Haiti, Africa, Louisiana, Vietnam, the French Indies, etc. Also offered as French 472. Prerequisites: Admission to M.A. in Romance Languages and Literature program or permission of instructor.

580 Special Topics (1-3). Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes. Prerequisite: Permission of the instructor. On demand.

590 Directed Studies in French Literature (1-3). Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available by permission of chairman only when student cannot take regularly scheduled courses.

Spanish Courses

514 The Generation of 1898 (3). An examination of the intellectual, critical, historical and social problems as reflected in the writings of Ganivet, Unamuno, Valle-Inclan, Baroja, Azorin, and others.

516 Medieval Spanish Literature (3). A study of selected medieval masterpieces in their Old Spanish form, with special emphasis on Romances, the Cantar de mio Cid La Celestina, El Corbacho, Libro del buen amor, etc. Includes a short history of the Spanish language.

519 Federico Garcia Lorca (3). A study in depth of the poetry and drama of Federico Garcia Lorca.

520 Cervantes and the Golden Age Novel (3). The development of prose in the Golden Age as revealed in Cervantes' works. Winter.

526 Golden Age Drama (3). A study in depth of the creation of national theater by Lope de Vega and his followers.

527 Pre-Columbian and Spanish Colonial Literature (3). A study of pre-Columbian works in drama, narrative, and poetry (Popol Vuh, Apu-Ollantay, Incan and Aztec poetry) along with a survey of Spanish-American colonial literature.

528 Contemporary Spanish Poetry (3). A comprehensive and intensive study of 20th-century Spanish poetry. The poets and their poetry will be studied in the light of literary movements, foreign influences, political tendencies and philosophical ideas.

529 Novel of the Mexican Revolution (3). The revolution as the principal focus of 20th-century Mexican fiction. The course will examine both the evolving understanding of the event/process and the sophistication of narrative technique employed in its presentation. Among the writers to be studied are Azuela, Guzman, Lopez y Fuentes, Yanez, Revueltas, Rulfo and Fuentes.

550 Modern Classics of Latin American Literature (3). The goal of the course is to familiarize the student with the principal Latin American writers of the modern period. The focus will be dual: the progressive sophistication of literary technique, and the refinement of social conscience. Among the authors to be studied are: Asturias, Borges, Carpentier, Cortazar, Donoso, Fuentes, Garcia Marques, Paz, Rulfo, and Vargas Llosa. Also offered as Spanish 450.

553 Spanish-American Short Story (3). A study of Spanish-American short stories from Romanticism to the present. On demand.

580 Special Topics (1-3). Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes. Prerequisite: Permission of the instructor. On demand.

590 Directed Studies in Spanish & Latin American Literature (1-3). Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available by permission of chairman only when the student cannot regularly scheduled courses.

Department of Geosciences

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Raymond M. Coveney, Jr. Director of Environmental Studies:

Caroline P. Davies

Professors:

Raymond M. Coveney, Jr., Steven L. Driever (principal geography adviser), Martha W. Gilliland (chancellor), Syed E. Hasan

Associate Professors:

Daniel P. Hopkins, Wei Ji, James B. Murowchick (principal graduate adviser), Tina M. Niemi (principal undergraduate geology adviser)

Assistant Professors:

Jimmy O. Adegoke, Caroline P. Davies, Jejung Lee Professors Emeriti:

Richard J. Gentile, Edwin D. Goebel, Paul L. Hilpman, Eldon J. Parizek

Department Description

The Department of Geosciences offers programs of study leading to bachelor of science and bachelor of arts degrees in environmental studies, geography and geology. The department offers a unique master of science degree program in urban environmental geology. Faculty members also participate in the Interdisciplinary Ph.D. program. Those who designate geosciences (geology or geography focus) on their application for admission to the doctoral program must meet admission and other requirements available from the department. See the School of Graduate Studies section of this catalog for more information about doctoral programs. The department takes a lead role in the undergraduate interdisciplinary environmental studies program. Courses offered by the department can be used to fulfill the requirements of the Missouri Department of Education for earth science and science-math teaching specialties.

Students majoring in environmental studies, geography or geology obtain a broad liberal arts education during their undergraduate career and at the same time receive sound fundamental training in the geosciences. Departmental faculty members are committed to educating nonmajors about the earth and environmental sciences as well as those who plan to pursue careers in the geosciences.

All undergraduate majors in the Department of Geosciences must maintain a minimum grade-point average above 2.0 in each course taken to fulfill departmental degree requirements. This minimum GPA applies to all UMKC courses and to all credit hours transferred from other institutions and accepted by the department.

Special Resources/Services

Geosciences Museum

1

The Geosciences Museum, founded by Richard L. Sutton, M.D., located in Room 271, R.H. Flarsheim Hall, contains relief models and interactive displays along with a full range of 2,500 spectacular specimens from all over the world. Hours of operation are 9 a.m. to 4:30 p.m. weekdays and 10 a.m. to 4 p.m. on Saturdays whenever school is in session. Admission is free.

Center for Applied Environmental Research

The Center for Applied Environmental Research (CAER) is administered by the Geosciences Department (professor Syed E. Hasan, director). The center is a resource for governmental agencies, private firms and the general public in matters of the environment. Its programs address such matters as applied geophysics, environmental geochemistry, underground space, foundation stability, waste management, geologic hazards, environmental justice, natural resource assessment and land-use planning. The department also offers a graduate-level Waste Management Certificate Program.

Graduate Certificate in Waste Management

In keeping with the demand for trained professionals in the field of waste management, a new Graduate Certificate *Program in Waste Management* was launched in 2003. The program is designed for professionals working in the waste management industry who desire advanced knowledge in the field but do not have the time to enroll in a graduate degree program that may take up to two years to complete. The graduate certificate program is designed to meet this need and also to enable students holding a bachelor's degree in an appropriate discipline to improve their knowledge in the waste management field and to prepare them to enter the waste managment industry with advanced knowledge at the graduate level. The carefully designed curriculum for this program consists of 15 credit hours of course work that covers every important aspect of waste management. Field visits to waste disposal facilities and a 5-day OSHA-approved Hazardous Waste Operator Training (HAZWOPER) course are included in the curriculum.

Required Courses	Semester
ENVSC 310 Field Experience in	_
Waste Management	Summer
GEOL 335 Introduction to Waste	XX / a to a
Management	Winter
GEOL 512 Geology and Hazardous Waste Management	Summer
GEOL 534 Hazardous Waste	Summer
Operation Management	May Intersession
GEOL 570 Hydrogeology	Winter
GEOL 597 Graduate Seminar	Winter

Master of Science: Environmental and Urban Geosciences

The Department of Geosciences offers a master of science degree in environmental and urban geosciences, the only such degree program in North America. This unique program provides advanced study in geology and prepares students to apply special skills to urban problems of space, resource availability and utilization, land use, natural hazards, and waste management. Although the diversity of the program enables students to follow either a broad-based or a specialized path, all students are required to successfully complete elements of the core curriculum, which includes five specific courses and a thesis.

Admissions Requirements

For full admission to the graduate degree program in environmental and urban geosciences (Code 6, degree-seeking status), the following requirements must be met:

- 1. Completion of an undergraduate degree with a major in geology and a grade-point average of 3.0 (A = 4.0) overall, as well as in the major;
- 2. A satisfactory score on the Graduate Record Examination (general test verbal and quantitative test scores 1000 or higher, analyzed writing score 2.5 or higher).

All regular M.S. students are expected to achieve satisfactory performance on a placement examination during their first semester of enrollment.

With department approval, students with non-geology undergraduate degrees may be admitted on a non-regular degree-seeking basis (Code 6-V). After successfully completing certain courses required for the undergraduate B.S. geology degree, including all non-geology science and mathematics prerequisites, these students may be granted degree-seeking status.

Graduate Assistantships

Teaching and research assistantships are awarded each semester to selected incoming graduate students. Assistantship applications and all supporting materials should be submitted by March 15 for fall enrollment.

Core Curriculum

Degree candidates for the M.S. degree program in environmental and urban geosciences must successfully complete the following courses:

- GEOL 551 Geotechnics
- GEOL 570 Hydrogeology
- GEOL 597 Graduate Seminar (3 hours required during first year of residence)
- GEOL 599 Research and Thesis: Geology

Select three from the following four choices:

- GEOL 531 X-ray Methods and GEOL 532 ICPMS Applications
- GEOL 535 Aqueous Geochemistry
- GEOL 541 Seismic and Potential Field Methods in Environmental Geophysics

Requirements for Retention

- 1. For newly admitted graduate students, elimination of all deficiencies such as the undergraduate geology degree calculus and the geography degree GIS requirement, is required with the completion of the first 12 hours of coursework for graduate credit. No graduate credit can be given for undergraduate courses taken to remove deficiencies.
- 2. A qualifying examination must be passed by all students before a master's program of study is filed. Students must take the qualifying examination during the first semester. Failure to take the exam as required will count as an unsuccessful attempt to qualify. With the approval of the department, students may take the examination a second time. A second failed attempt will result in dismissal from the program.
- 3. A 3.0 (B) average or better must be maintained in all graduate coursework. In addition, a 3.0 (B) average and a satisfactory balance of grades must be maintained in the approved program of study, or the student will be subject to either probationary status or dismissal from the program.

Requirements for Graduation

- 1. Formal acceptance of a planned program of study and research by the department and the graduate officer of the College is required. Such a program must comprise at least 30 graduate credit hours, approved by the supervisory committee, 3 to 6 hours of thesis, and completion of all requirements of the core curriculum. No more than 40 percent of the program may be 300- to 499-level courses, and at least 18 hours must be at the 500 level or above.
- 2. A formal written thesis is required of all students, and its format must be in accordance with that prescribed by the School of Graduate Studies.
- 3. A final examination is required, including oral examination of thesis research and related coursework.
- Satisfactory compliance with all applicable requirements of the School of Graduate Studies including continuous enrollment and residency is required.

Geography Courses

502 Environmental Remote Sensing (3). This course will provide students with innovative techniques for landscape-level environmental analysis, geographic studies, earth science research, and natural resources management using remotely sensed data including satellite images. Students will be taught basic remote sensing concepts and technical skills, including energy radiative transfer processes in remote sensing, sensors and resolutions, computer-based image processing and classification, and remote sensing/GIS integration. Prerequisite: Geog 401 or permission of the instructor. Offered: Fall 2000

503 History and Philosophy of Geography (3). A survey of geographic thought since antiquity. The substance of geography will be sought primarily in scholarly treatises, formal analytical systems, and cartography, but the course also addresses geographical principles emerging from the history of such matters as government, law economy, religion, and material culture. Readings, lectures, discussions, research, writing. Prerequisite: Baccalaureate degree or permission of the instructor. On demand. Also offered as Geography 403. Prerequisites: Baccalaureate degree or permission of instructor

504 Biogeography and Landscape Ecology (3). Principles and applications of biogeography and landscape ecology, emphasizing distribution of major ecosystems and related plants and animal species on earth, biodiversity, landscape patterns and processes, and physical, biological, and human interactions. The course explores ecosystem and landscape analyses using advanced GIS, remote sensing, and spatial modeling methods for real problem solving in environmental and biological research, ecosystem conservation, and urban planning and studies. Prerequisites: Geog 401, Geog 402/502, or by permission of instructor.

510 Landscape, Language, Literature, and Law (3). An examination of the geographic underpinnings and implications of languages, literatures, and jurisprudence. The course explores languages' historic rootedness in the interactions between human beings and their surroundings; the varying geographic expressiveness and discrimination of languages; the effect and significance of literary evocations of landscapes; and the cultural and environmental geographic content of the language of law. Readings, lectures, discussions, writing. Prerequisite: Permission of the instructor. Offered: On demand. Also offered as Geography 410.

515 History and Philosophy of Cartography (3). An examination of the techniques, assumptions, psychology, and cultural implications of mapping from the Stone Age to the age of satellites and the computerized Geographic Information System. Readings, lectures, discussions, writing. Prerequisite: Baccalaureate degree or permission of the instructor. Offered: On demand. Also offered as Geography 415.

526 Paleoecology: Microfossils and Climate Change (3). Paleoecology will focus on questions addressing past environments and past climates based on the ecology of microfossils. Micro-organisms are very sensitive to a wide variety of environmental conditions including temperature, precipitation, hydrology, water chemistry, salinity, habitat, and pollution. The fossil remains of these organisms are used as proxy indicators for reconstructiong past environmental conditions, climate change, vegetation dynamics, and human impacts. Students will have the opportunity to process microfossils and make interpretations based on analysis of data. Offered: Every other Fall Prerequisite: Permission of Instructor

530 Location Theory (3). An analysis and evaluation of the basic theories that have been developed to account for the spatial arrangements of economic activity. Emphasis on urban areas as nodes of economic interaction. Three

hours lecture and discussion per week. Prerequisite: Geography 311 and six hours in economics or urban studies. On demand.

542 Quaternary Environments (3). This course reviews earth climatic history and focuses on major mechanisms for global and regional climate change. Methods of paleoclimatic reconstruction are examined, including analysis of proxy data and climate modeling. Application of these methods toward prediction of future climate change is also explored. Prerequisites: Physical Geography/Earth Science; Climatology; or permission of instructor. On demand. Also offered as Geography 442.

544 Geo-Computation Methods for Earth and Environmental Sciences (3). This course will focus on advanced computation methods for the analysis and modeling of complex and often non-deterministic processes in the spatial and environmental sciences. Students will be introduced to innovative techniques for analyzing large datasets with attribute spaces of very high dimensionality, including hyper-spectral remote sensing data. Prerequisites: Geog 402 or permission of instructor.

548 Satellite Climatology (3). Use of satellite observations to study the climate system. Discussions consider the development of satellite climatology, sensors, platforms and methodologies use to estimate climate variables from radiance measurements. Aspects of climate that are emphasized include cloud climatologies, cloud systems, atmospheric moisture, radiation budget, and land-surface conditions. Prerequisites: Geog 315 or permission of instructor. Offered: Every other Fall

597 Graduate Seminar in Geography (3). Advanced reading in Cultural or Physical Geography. Readings, lectures, discussions, writing. Prerequisite: Baccalaureate. Offered: On demand.

598 Special Topics in Geography (1-3). Advanced independent research in Cultural or Physical Geography. Prerequisite: Baccalaureate. By arrangement with instructor.

598A Special Topics in Cultural Geography (1-3). Advanced independent research in Cultural Geography. Prerequisite: Baccalaureate. By arrangement with instructor.

598B Special Topics in Physical Geography (1-3). Advanced independent research in Physical Geography. Prerequisite: Baccalaureate. By arrangement with instructor.

598D Special Topics in Advanced GIS and Remote Sensing (1-3). Advanced independent reserch in geographic information science (GIS) and remote sensing. Offered: On Demand Prerequisite: Permission of instructor

598F Special Topics: Geostatistics and Modeling (1-3). Advanced independent research in geostatistics and modeling techniques. Offered: On Demand Prerequisites: Permission of instructor

598K Issues in Waste Management (1). This course focuses on the critical problems of managing the waste materials generated in our society. The course includes discussion of various types of waste-municipal solid waste, hazardous (industrial) waste, nuclear and medical wastes. Sources, handling, storage, transportation, treatment and disposal of these wastes are reviewed. Experts from government and the waste management industry give guest lectures. Prerequisites: None. Offered: Fall & Winter.

690 Special Research Topics (1-3). Student will produce a major research paper suitable for publication under the direction of their instructor.

699R Research and Dissertation (1-10). Research for dissertation in partial fulfillment of the Geosciences requirements for the Ph.D. degree.

Geology Courses

512 Geology and Hazardous Waste Management (3). Nature, sources and characterization of hazardous waste; collection, transportation and disposal of hazardous wastes. Fundamentals of toxicology and risk assessment. Application of geologic principles and methods in the assessments and remediation of abandoned hazardous waste sites and contaminated aquifers. Review of selected case histories. Experts from government and private organizations will be invited to deliver guest lectures. An out-of-town field trip to a hazardous waste site is required. A term paper based on library research or an approved experimental project is required for graduate credit. Pre-requisites: Geol 325, 342 & 350 or permission of the instructor.

525 Quaternary Geology (3). The study of Quaternary processes, surficial deposits, and land forms. Course content will cover both the glaciated and nonglaciated portions of the United States as well as the interrelations between Quaternary geology and urbanization. Three hour lecture. Field trips. Prerequisite: Geology 314, baccalaureate degree in geology or permission of the instructor.

531 X-Ray Diffraction and Fluorescence Methods: X-Ray Mthds Geol/Anly (2). Theory and practical application of x-ray diffraction and fluorescence methods in characterizing geologic materials. Prerequisite: GEOL 312 or consent of instructor. Two hours lecture and one 2-hour lab per week for 8 weeks. **532 ICPMS Applications in Geology (2).** Theory and practical application of Inductively-Coupled Plasma Mass Spectrometry in the geosciences and environmental sciences. Prerequisite: GEOL 312 or consent of instructor. Two hours lecture and discussion, and one 2-hour lab per week for 8 weeks.

534 Hazardous Waste Operation Management (2). Overview of federal regulations dealing with hazardous waste management, toxicology, hazard communication, site management, air monitoring, operating procedures, and health and safety. The course includes hands-on training on spill control, equipment use and emergency use and emergency response. Practical training involves physical stress and participants must be in good physical health. This course satisfies OSHA's 40 hour training requirement for hazardous waste personel. Prerequisites: Geog/Geol 335 or permission of instructor. Offered: Every Summer

535 Aqueous Geochemistry (3). This course is directed to two objectives. First it will equip the students with a basic understanding of the geochemical principles and calculations which are directly related to environmental problems and second, it will provide the student with a basic understanding of specific problem areas in environmental geochemistry. Prerequisites: Chem 211 and 212 or equivalents. Baccalaureate degree in geology or permission of the instructor. Offered: On demand.

541 Seismic and Potential Field Methods in Environmental

Geophysics (3). (3) Fundamental theory and near-surface applications of the geophysical methods; (1) seismic refraction, (2) seismic reflection, (3) gravity, and (4) magnetics. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties and archaelogical protection. Course will include a field component illustrating application of selected techniques to a local environmental problem. Prerequisites: Baccalaureate degree in Geology or permission of instructor. Offered: Fall

542 Electrical Methods in Environmental Geophysics (3). (3) Fundamental theory and near-surface applications of the electrical geophysical methods; (1) electrical resistivity, (2) electromagnetics, (3) ground penetrating radar, and (4) induced polarization. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties and archaeological protection. Course will include a field component illustrating application of selected techniques to a local environmental problem. Prerequisites: Baccalaureate degree in Geology or permission of instructor.

551 Geotechnics (4). Integration of the basic principles and concepts from material sciences, rock and soil mechanics, and civil engineering. Mechanical properties, geologic aspects and engineering classifications of earth materials and the effects of physical forces on their engineering behavior will be emphasized. Three hours of lecture and two hours of laboratory each week. Field trips. Prerequisite: Physics 210, 220, 230, Geology 350 or permission of the instructor.

555 Environmental Impact Analysis (3). A systematic analysis of the spectrum of environmental changes related to human use and occupancy in urban settings. Study of the nature of activities such as industrialization, mining, urbanization and transportation, and their effect on the specific site and general region. Methods of measuring aesthetic and economic quality of the urban areas will be explored in an attempt to facilitate writing environmental impact statements. Prerequisites: Baccalaureate degree in geology or permission of the instructor.

559 Inquiry-based Field Studies for Teachers (3-6). Inquiry-based studies in environmental science, environmental chemistry and geology involving collaborations between course participants, practicing scientists and professional educators. The course is designed especially for pre- and in-service teachers of all levels and contact areas to enhance critical thinking, problem solving and process skills as defined by state and national standards. Projects will balance field and lab studies with analysis and presentation of results through electronic, oral and written means. Prerequisites: Permission of instructor. Offered: On demand

561 Geologic Mapping (3). Analysis of the stratigraphic section in the greater Kansas City area by field investigation. Compilation of descriptive data and the construction of detailed geologic maps. Practical problems to determine the most beneficial use of the land in an area that is rapidly becoming urbanized. Prerequisite: Baccalaureate degree in geology or permission of the instructor. Previous field mapping experience highly recommended.

570 Hydrogeology (3). Geology and hydrologic factors controlling the occurrence, movement, quality, recovery and development of water supply and distribution. Problems relating to urbanization of flood plains. Prerequisite: Baccalaureate degree in Geology or permission of the instructor.

571 Tectonics (3). A detailed inquiry into plate tectonics and the geophysical and geological data that define the motion of lithospheric plates. Global examples of divergent, convergent, and transform plate boundaries will be studied through lectures, discussions, problem sets, and term papers. Prerequisite: Geology 325 and 350. Offered: On demand.

572 Earthquake Geology (3). This course is detailed inquiry into the study of present and past earthquakes as they are preserved in the seismological, geophysical, and geological record. Global examples of earthquakes will be studied through lectures, discussions, problem sets, term papers, field trips and field projects. Prerequisite: Geol 350 or permission of the instructor. Offered: On demand.

597 Graduate Seminar (1-2). Graduate students in geology will attend guest speaker lectures, write summaries of speaker talks, and will give oral presentations on various topics. (baccalaureate degree in geology or permission of instructor.

598 Special Topics in Urban Environmental Geology (1-3). Individual research into practical geoscience problems in the urban environment. Provides opportunity for individual research in applied geology. Topic and method to be established by student and academic supervisor prior to enrollment. Instructor: By arrangement.

598A Special Topics in Urban Environmental Geology: Petroleum Geology (1-3).

598B Spec Topics in Urban Environmental Geology: Soil/Rock Mechanics (1-3).

598C Sp Topics in Urban Environmental Geol: Stratigraphy/Paleontology (1-3).

598D Spec Topics in Urban Environmental Geology-Environmental Geology (1-3).

598E Special Topics in Energy and Mineral Resources (1-3). This course provides students an opportunity for advanced independent research in energy and mineral resources. Prerequisite: Permission of instructor

598H Special Topics in Urban Environmental Geology - Geochemistry (1-3).

598I Special Topics in Urban Environmental Geology (1-3).

598J Special Topics in Urban Environmental Geology: Environmental Sci (1-3).

598K Issues in Waste Management (1). This course focuses on the critical problems of managing the waste materials generated in our society. The course includes discussion of various types of waste-municipal solid waste, hazardous (industrial) waste, nuclear and medical wastes. Sources, handling, storage, transportation, treatment and disposal of these wastes are reviewed. Experts from government and the waste management industry give guest lectures. Prerequisites: None. Offered: Fall & Winter.

598M Special Topics in Geostatistics and Modeling (1-3). Advanced independent research in geostatistics and modeling techniques. Prerequisite: Permission of instructor Offered: On demand

599 Research and Thesis: Geology (1-9). Individual directed research by the student leading to the preparation of a formal written thesis and oral defense. Instructor: By arrangement.

690 Special Research Topics (1-3). Student will produce a major research paper suitable for publication under the direction of their instructor.

699R Research and Dissertation (1-10). Research for dissertation in partial fulfillment of the Geosciences requirements for the Ph.D. degree.

Gerontology Certificate Program

(816) 235-**2186** http://www.umkc.edu/CAS/

Program Director: Linda Breytspraak Program Adviser: Liz Kendall

Program Description

A graduate gerontology certificate program is offered through the College of Arts and Sciences Continuing Education Division and the Center on Aging Studies. The certificate can be completed either in conjunction with a graduate degree program or as a free-standing credential. Students in such diverse fields as sociology, psychology, nursing, dental hygiene, pharmacy, law, social work, and education have completed the certificate. Students enrolled in a degree program must declare their intention to pursue the certificate to their adviser and to the gerontology adviser in the Center on Aging Studies. As the number and proportion of older adults in the population increases, career opportunities in a variety of arenas are on the rise.

Eighteen credit hours are required to complete the minor or certificate:

Required Courses		Hours
Â&S 500	Interdisciplinary Colloquium on Aging	3
Sociology Core (Choose one)		
SOCIOL 410R	Aging in Contemporary Society	3
SOCSC 411P	Aging in American Society:	
	Past and Present	3
SOCIOL 516	Sociology of Death & Dying	U
SOCIOL 580	Special Topics (Approved 3-credit	
	special topics course can meet	_
	the Sociology requirement.)	3
Psychology Core (Choose one)		
PSYCH 540	The Psychology of Aging	3
PSYCH 543	Adult Development and Aging	3
Health/Biology Core (Choose one)		
NURSE 430	The Experience of Health in Aging	g 3
NATSC 430PC	Biological & Ethical Issues	
	in Aging	3
Field Practicum		
A&S 592	Field Practicum in Aging	3

Elective Courses

Three elective credit hours can be taken to complete the program. Students should contact the gerontology adviser or the Center on Aging Studies Web site for a current list of courses available for elective credit. Students wishing to enroll in the certificate program must meet all requirements for admission to UMKC and to their intended major academic unit (if applicable). They must declare their intention to pursue the certificate to their adviser and to the gerontology adviser in the Center on Aging Studies. For information on enrollment, contact the gerontology program adviser at the Center on Aging Studies.

Department of History

203 Cockefair Hall 5121 Rockhill Road (816) 235-**1631** Fax: (816) 235-**5723** history@umkc.edu http://www.umkc.edu/history

Mailing Address

University of Missouri-Kansas City Department of History CH 203 5100 Rockhill Road Kansas City, MO 64110-2499

Department Chair:

Louis Potts

Professors Emeriti:

Jesse V. Clardy, John T. Graham, Herman M. Hattaway, Lawrence H. Larsen, James C. Olson (president emeritus, University of Missouri), Stanley B. Parsons, Joseph P. Schultz

Professors:

Gary L. Ebersole, Miriam Forman-Brunell, Carla L. Klausner (principal graduate adviser), Bryan LeBeau (dean, college of arts and sciences), Dennis Merrill, Patrick A. Peebles, Louis W. Potts

Associate Professors:

William B. Ashworth, Jr., James S. Falls (principal undergraduate adviser)

Assistant Professors:

Andrew Bergerson, Diane M. Burke, John Herron, Lynda Payne, Shona Kelly Wray

Adjunct Faculty:

David Boutros, Evelyn Hunt, Gary Palmer, Alan Perry, Linna Place, Frederick Spletstoser, Fran Sternberg, William O. Stevens, William Worley, Mary Ann Wynkoop

Department Description

The faculty of the Department of History believe history is an essential component of a liberal arts education. As an important part of the curriculum, historical study enables the student to understand the interaction of many aspects of state, society and culture, and the dynamics of human change. It offers a valuable perspective on contemporary problems as well as knowledge of the past for its own inherent interest.

Department offerings, at the undergraduate and graduate levels, include the major areas of historical concern such as American history and ancient, medieval and modern European history. In recognition of the role of a university in its community – local, national and world – the department offers courses in urban and social history; the history of science; Asian and Middle Eastern history; Judaic Studies; religious studies; women's studies; and black studies. The department is also vitally involved in interdisciplinary courses and programs.

Master of Arts: History

The master of arts degree in history entails intensive study in a major field of the student's interest and gaining an understanding of historical theories and epistemologies. The history faculty intends to balance training in coursework, research and writing.

The Department of History offers two options leading toward the master of arts degree: the M.A. in history with thesis and the M.A. in history without thesis. Both options require completion of a minimum of 36 credits of graduate-level work. The M.A. in history with thesis will require demonstration of language competency if the subject matter requires it. The faculty mentor will determine how this requirement should be fulfilled. The M.A. in history without thesis does not require language competency.

Admission Requirements

An applicant whose undergraduate major was history, and who had a 3.0 grade-point average in history courses and a 3.0 grade-point average overall, will be considered for admission as a regular graduate student. Applicants who do not have an undergraduate degree in history, but whose baccalaureate program included substantial training in history and/or related subjects, may also be considered for regular admission. Applicants must also score a minimum of 500 on the verbal portion or a minimum of 3.5 on the analytical writing portion of the GRE test in order to be admitted to the program. In addition, the department requires that two essays (one that is autobiographical in content, and one detailing the applicant's scholarly interests), a writing sample, and three letters of recommendation must accompany the admission application. All application materials should be sent directly to the Office of Admissions, Administrative Center, 5115 Oak, Kansas City, MO 64110.

Financial Aid

There are a limited number of graduate teaching assistantships available. For information and forms, contact the history office directly. For all other inquiries about financial aid, contact the Financial Aid and Scholarships Office. See the Addresses and Phone Numbers section of the Appendices in this catalog for more information.

Selection of Supervisory Committee and Program of Study

Once admitted to the program, the student must consult with the principal graduate adviser, who will direct the student to a faculty mentor. The faculty mentor will assist the student in designing his/her program of study and will assist the student until a primary faculty adviser has been identified in the student's major field of study. For a master's degree at UMKC, 20% of the graduate credit hours appearing on the program of study may be transferred from another recognized graduate school. Upon completion of 12 hours, the student and the department faculty adviser must select a three member program supervisory committee, which will be chaired by the department faculty adviser. The student is responsible for convening the supervisory committee, which will approve and sign the program of study.

Course Requirements

All students are required to take the following: 1) Research Methodology (History 581); 2) two Research Seminars (History 587); and 3) any two graduate-level Colloquia. Up to 9 credits may be carried outside the department provided 1) they are demonstrably graduate-level courses; 2) they clearly relate to the student's program of study; and 3) they receive the approval of the student's committee.

Deficiencies

Students must maintain a minimum 3.0 graduate grade-point average. There will be a yearly evaluation of the student's status. If a student's grade point falls below 3.0 the student will be placed on probation. If a student's grade-point average is below 3.0 at the end of his/her program, the student may petition the department for permission to take an additional six credits of course work. If at the end of all course work a grade-point average of 3.0 has not been achieved, the student will be dropped from the program. Incompletes will be given only when there are legitimate reasons for not completing course requirements on time, and only when there are reasonable expectations that work can be completed within the time allowed by the School of Graduate Studies.

M.A. Examination

Candidates for the M.A. degree without thesis will be required to take a written examination, which will precede an oral exam. The written exam will consist of three parts. Each member of the committee will submit a list of questions, and the candidate will answer questions as designated from each list. At the oral examination, the committee will question the candidate about his/her answers and about the other questions not answered on the written examination. The faculty expect all students to demonstrate in-depth comprehension of the major field; this includes chronology, bibliography, major themes and interpretations.

School of Graduate Studies Requirements

All graduate students must abide by School of Graduate Studies requirements (see the General Graduate Academic Regulations and Information section of this catalog) in addition to Department of History requirements.

Honorary Organizations

The department sponsors a chapter of the national history honorary, Phi Alpha Theta. Admission into the honorary requires a 3.2 grade-point average in a minimum of 12 credits of graduate work. The honorary sponsors programs and lectures during the school year, and members are often invited to read papers at the regional conventions. Membership in Phi Alpha Theta is noted on each honoree's official transcript.

Policy in Regard to Allegations of Research Dishonesty:

Plagiarism is an inexcusable act in the view of the History faculty. Any student guilty thereof will be liable to expulsion from the program. A detailed statement by the faculty is available in the history office. Research dishonesty refers to any conduct that is intended to mislead or communicate false research data or results, or which communicates such data or results in reckless disregard of their false or misleading character. Illustrations of research dishonesty include, but are not limited to, the following:

- False or misleading statements or publications concerning research data or results;
- Intentional or reckless distortion of misinterpretation of research data or results;
- Use of research methods which the researcher knows to be unreliable or which produce erroneous results, unless appropriately explained in publications and reports of the research;
- Release of research date or scholarly efforts of other persons, and representing them as one's own or failing to give appropriate credit to their sources; or
- Misuse of the work of others or misrepresentation of authorship as that of the student.

History Courses

500CM Cluster Course: Mexico, Central America and the Human Condition (3). See course description for History 300CM.

502 America,1000-1763: The Formative Era (3). Early American history emcompasses the formative era of many institutions and attitudes which still persist in present-day America. A study of how these patterns and policies emerged will enlighten us as to our current ways our society seeks to adapt to change.

503 America, **1763-1783**: **The Revolutionary Heritage** (**3**). The American Revolution created American history by creating a new nation. What the American Revolution was depends to a large extent upon what Americans think they are or ought to be. The goals of this course, therefore, are twofold: (1) to probe the nature, causes and consequences of the American Revolution; (2) to assess the intentions and behavior of both the Framers of the Constitution in 1763-1783 and the inheritors of modern America.

504 America, 1783-1828: The National Experience (3). See course description History 304.

505 America, 1828-1852: The Jacksonian Period (3). See course description History 305.

506 America, 1850-1877: Civil War and Reconstruction (3). See course description History 306.

507 America 1877-1917: Development of Industrial America (3). See course description History 307.

508A America 1914-1945: The Era of the World Wars (3). See course description for History 308B.

508B America 1945-Present: Our Times (3). See course description for History 308B.

511 Medieval Civilization I (3). See course description History 411.

512 Medieval Civilization II (3). See course description History 412R.

512A Women and Family in Medieval and Early (3). This course explores the roles of women in the social, economic, political, and cultural environments of medieval and early modern Europe. We examine the lives of women in all areas of life, from the ordinary to the extraordinary, in urban and rural environments, from the centers of religious and political power to the margins of society. Focus will be on the world of work for urban and peasant women and on the social and legal institutions of marriage, kinship, and the family. The course makes extensive use of primary source by and about women during this period.

512B The Black Death and Late Medieval Society (3). This course examines all aspects of late medieval and early Renaissance society in Western Europe. The Back Death of 1348/1349 serves as the entry point into the historical study of the economy, demography, and culture during this transitional period.

513 Renaissance (3). See course description History 413.

514 Reformation (3). See course description History 414.

515B The Age of Absolutism & Enlightenment: Europe from

1600-1800 (3). This course is designed to provide the student with a general overview of major historical trends in early modern European history from the deluge of the Thirty-Years's War to the rise of Napoleon. Integrating political, military, social, economic, and cultural history, we will focus on the rise of Absolutism and enlightenment as the foundations for the modern world and in their own terms. All assigned readings will be in English; a general background in European history would be best.

517 Nations & Empires: Europe in the 19th Century (3). This course is about one of most exciting periods in European history-a time that was marked by avid nation building, world- wide empire, rapid industrialization, and ultimately, the introduction of critical technical innovations like the telephone, the wireless telegraph, the x-ray, the cinema, bicycle, automobile, and airplane. It was also a time out of which stream of consciousness writing, psychoanalysis, cubism, and the theory of relativity emerged. It was, in short, a period of rapid change and adjustment, full of exciting opportunities and an array of social, political, and cultural discontents. The course begins with the nation making that followed in the wake of the Napoleonic era and it ends with the destruction of German Empire in the First World War. The goals of this course are to explore the period leading up to that war and to try to understand the many-sided richness of Europe during this period. We will explore the ways in which society, culture, and politics influenced each other and gave rise to a range of new intellectual, political, and cultural movements that shaped the world as we know it.

518 The Age of Extremes: Europe in the 20th Century (3). This corse is about an age of extremes, one marked by extraordinary violence and unprecedented peace movements, ever- rising standards of living and devasting depressions, technological wonders and technological horrors. The emphasis of this course is on human experience, and we will concentrate on analyzing the role of the war, revolutions, and popular movements in shaping the politics and culture of modern Europe. Against this background of political upheaval and renewal, we will pay particular attention to the changing roles of women during the twentieth century, the impact that a heightened awareness of class and ethnicity had on peoples's everyday lives, and Europe's changing place in the world. This course is meant to provide students with an overview of Europea n history during the twentieth century. Lectures will be interspersed with a number of films, a heavy emphasis will be placed on daily discussions, and one day a week will be devoted to roundtable discussions of the readings and films led by a member of the class.

519 Contemporary European History: 1930-2000 (3). This course is designed to provide students with a general overview of major trends in modern european history in the aftermath of the Second World War: modernity and modernization, racism and mass murder, postwar stabilization and normalcy, cold war and imperialism, corporatism and organized captalism, decolonization and dissolution, nonconformist revolt and social change, as well as challenges to the polity at the end of the century. We will explore these

issues by theme and through case studies rather than by attempting universal coverage, and there will be a certain emphasis on cultural approaches. All assigned readings will be in English, a general background in European history would be best.

523 Social History of Recent America (3). See course description History 323R.

525R European Criminal Justice History, 500-1900 (3). This course will survey European crime, criminal procedure, policing and punishment between 500 and 1900. Particular attention will be given to changing methods of proof (oaths, ordeals, juries); changing type of criminal activity (banditry, vagrancy, witchcraft, professional theft) and changing penal strategies (the stocks, breaking on the wheel, the workhouse, the prison, the penitentiary). English experiences are emphasized.

526R The Scientific Revolution 1500-1700 (3). See course description History 426R.

527 The Darwinian Revolution, 1650-1900 (3). See course description History 427R.

528A History of the Body (3). This advanced course will explore the new field of the history of the body, with particular attention to sexuality and gender. Topics will include the history of sexualities, the body and society, body disciplines, medical practices and representations of illness, beauty, and fashion, and the relationship between sexualities and nationalisms.

528B Women & Medicine:Patients & Practitioners from

Antiquity-Present (3). This course explores, in a selective fashion, the role of women in Western Medicine both as health care providers and patients. The subject of the history of medicine is too broad to be covered comprehensively in a semester, and so we will focus on diseases or physical conditions which were believed to be limited to women-childbirth, certain mental health conditions, reproductive health, breast cancer-as well as the increasing marginalization of women within the profession of health care providers to those branches concerned primarily with "women's problems."

530 The Ordeal of Total War Europe, 1939-1945 (3).

531 Medieval England, 1066 to 1485 (3). See course description History 431R.

532 Tudor-England, 1485-1688 (3). This course covers the history of England from the accession of Henry VII in 1485 to the crowning of William and Mary in the Glorious Revolution. Its main emphasis is the Tudor dynasty 1485-1603 with special reference to the transformation of England into a modern state, Re-Reformation, the role of Parliament, etc. The course concludes with the major characteristics of the early Stuart period.

533 Modern Britain, 1603-Present (3). This course examines the rise and fall of the Stuart dynasty and the effects of civil war, rebellion, and religious turmoil on the peoples of Britain. Next, the establishment of Cabinet government in the eighteenth century, and the loss of the American colonies will be discussed. The dramatic transformation of Britain from a largely isolated and agricultural society to an urban and the industrial one, will be analyzed with particular reference to class, race, and gender. Finally, the role of Britain in both world wars will be considered along with the institution of the welfare state and the transformation of Britain from a world power to a member of the European community of states.

535R Early Modern German History: 1640-1890 (3). This course traces the emergence specific, centralized nation- states and empires as well as a particular, industrial society in the 250 years since the Thirty-year's War. It introduces students to the national histories of Germany in order to help them think critically about national historiography in general. We will compare the many variations within Central Europe: Prussia/Austria/the Third Germany, city/town/village, state/ society, as well as differences of caste/class/gender/ sexuality/religion. All assigned readings will be in English; a background knowledge of European history is recommended. This course will be followed by History 536: the contents and assignments will be coordinated, but the former course is not a prerequisite for the latter.

536 Modern German History: 1890-1990 (3). This course traces history of Central Europe from the fall of Bismarck to the reunification of Germany one century later. It will ask students to think critically about the relationship between state and society, elites and 'ordinary' Germans, in the various German-speaking regimes that existed over the course of this era: two empires, two interwar republics, two fascist dictatorships, and three post-fascist republics. All assigned readings will be in English; a background knowledge of European history is recommended. This course follows from History 435/535; the contents and assignments will be coordinated, but the former course is not a prerequisite for the latter.

537 Nazi Germany (3). See course description History 437.

544 Islam & the Arabs: The Formative Period (3). See course description History 444R.

545 The Ottoman Empire in the Middle East to WWI (3). See course description History 445.

546 The Middle East from World War I to the Present (3). See course description History 446R.

553 Immigrants and Immigration in American History (3). See course description History 353.

554 Women in Modern America (3). See course description History 354R.

555A Indians of South America and the European Invasion (3). See course description History 355A.

555BA Indians of North America to 1789 (3). The history of the native peoples of North America from their origins to the era of the American Revolution. Prerequisite: None. Offered: Fall.

555BB Indians of North America Since 1789 (3). The history of the native people of North America (Indians and Inuit) and their interaction with the European invaders since 1789. This course is the sequel to History 555BA, Indians of North America to 1789. Prerequisite: None. Offered: Winter.

556 Rise of the City in the U.S. (3). See course description History 356.

556R Kansas City: History of a Regional Metropolis (3). See course description History 356R.

557 The American West (3). See course description for History 357.

558R History of the American South (3). See course description for History 358R.

559R The Confederacy and the Myth of the Lost Cause (3). See course description for History 359R.

561R American Foreign Relations (3). See course description for History 361.

562J Japanese Civilization (3). A survey of Japanese civilization and cultural history from the prehistorical period to the present. Emphasis on the interplay between religion, the arts, politics, and social structure.

563R Military History of the U.S. (3). See course description for History 363.

566R American Economic History Since 1865 (3). The course deals with the emergence of Industrial America since 1865. It will cover the rise to dominance of the large modern corporation, with the problem of economic and social instability and stability, with the rise of trade associations, cartels, and government regulation in an unstable economy, and with the evolution of American economic policy and national economic planning. This course is the same as economics 540r.

566RR American Labor History (3). This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class. Offered: On demand.

567RS Myth and Ritual (3). "Myth" and "ritual" have long been fundamental categories in the study of religion. This course will briefly survey some of the major theories and approaches to the study of myth and ritual from the Enlightenment to the present. Will not only trace the shifting meanings of "myth" and "ritual," but will critically evaluate the utility of diverse approaches to the study of religious phenomena designated by these terms. Reading will include theoretical works, as well as selected case studies.

570R Ancient Egypt (3). See course description for History 470.

571R Ancient Greece (3). See course description for History 471.

572R Ancient Rome (3). See course description for History 472.

573R History of Astronomy (3). See course description for History 473.

575R The History of Ancient Israel (3). See course description for History 475.

576R Medieval Jewish History (3). See course description for History 476. **577R Modern Jewish History (3)**. See course description for History 477.

578R The Holocaust and the State of Israel (3). See course description for History 478.

580 Quantitative Research Methodology (3). This course will cover selected topics related to quantitative methods in historical research, including the quantification of data, descriptive statistics, preparation and analysis of a data set for statistical analysis by computer, and microcomputer methods. Students will complete a series of exercises.

581 Research Methodology (3). An introduction to a variety of research tools and techniques including such topics as evidence, critical method, verification, bibliography, book review, computers, statistics, and archival methods.

582 Colloquium in American History I (3). These courses are designed to acquaint the graduate student with the writings and theories of major American historians. Faculty lectures are combined with student bibliographical essays and the reading of important historical works in order to prepare the student for the final examination taken upon completion of M.A. course work. Books read in the course compose a large proportion of the departmental reading list. M.A. candidates in American history are required to take both courses. History 582 covers American history to 1865; History 583 covers the period since that date.

583 Colloquium in American History II (3). These courses are designed to acquaint the graduate student with the writings and theories of major American historians. Faculty lectures are combined with student bibliographical essays and the reading of important historical works in order prepare the student for the final examination taken upon completion of M.A. course work. Books read in the course compose a large proportion of the departmental reading list. M.A. candidates in American History are required to take both courses. History 582 covers American History to 1865; History 583 covers the period since that date.

585 Colloquium in European History II (3). The European History Colloquium II will examine some of the crucial problems or watersheds in European history from the Reformation through the 20th century. The course seeks to provide an in-depth study of specific topics and of the associated bibliography.

586 Colloquium in World History (3). The World History colloquium encompasses the major fields of World history, non-western history and Judaic studies. Course requirements include weekly discussions on specific topics and a research paper or project due by the end of the semester. The methodology and ideas relating to each field will be discussed in a comparative perspective. Content will vary according to the field of the instructor. This course may be repeated with the permission of the instructor.

587R Research Seminar (3). Students in this course will produce a major research paper under the direction of the instructor: a self-contained thesis chapter, an article for publication or the equivalent.

591 Archival Methods (3).

592 Archival Internship (3).

593 Museum Science (3). This course is designed to acquaint students with specific careers in museums and historical agencies; to introduce students to the wide range of operating issues facing those working in the museum profession on a day-to-day basis; and to familiarize students with the organizations, reference works and resources available to develop the skills and training required for those who choose to make this their profession.

597 Non-thesis Research/Reading (1-6). Individual direction of student reading or research by selected, consenting faculty. This course can be taken only when faculty supervision is unavailable in colloquia or seminars.

599R Thesis (1-6). A contribution to knowledge based upon extensive research and reflective of careful analysis. Before writing a thesis, the student must clear the topic and research design with the Supervisory committee.

680 Doctoral Colloquium (3). This course will examine the writings and theories of major historians in a particular field of history. The authors, works and intellectual currents which form the basis of the colloquium will vary from semester to semester, depending upon the professor's expertise and design for the course.

687 Doctoral Research Seminar (3). Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

687RA Doctoral Research Seminar (3). Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

687RB Doctoral Research Seminar (3). Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

697 Doctoral-level Independent Reading (1-6). Individual reading under the supervision of members of the History Doctoral Faculty in preparation for the Comprehensive Examination for the Ph.D.

699R Dissertation (1-15). Course credits in dissertation.

Master of Arts in Liberal Studies

(816) 235-**6257** mals@umkc.edu

Program Director: Burton Dunbar

Program Description

The master of arts in liberal studies degree program enables mature individuals to pursue part-time, interdisciplinary studies at the graduate level without specializing in any one subject area. Offered at night and during the weekend, courses provide participants the opportunity to extend the best experiences of baccalaureate liberal education to the graduate level. Students admitted to the program will identify their own interests within the wide array of graduate courses in the College of Arts and Sciences and will plan individualized programs of study with the cooperation of the director of the program.

The end result of each participant's matriculation should be a challenging experience that samples the richness of literature, the fine arts, history, and those principles of the social and natural sciences that affect our lives. UMKC is fortunate to have the additional cultural resources of a wide array of museums, libraries, archives, and special exhibits within the Kansas City area. Many of the courses available for the M.A. in liberal studies curriculum are designed to take specific advantage of these community resources.

The 21st Century: Complex Communities, Cultures and Critical Choices

The broader unifying experience of courses, offered M.A. in liberal studies participants, is the opportunity to explore some of the basic issues affecting life in modern urban America. Students explore problems such as the environment, international conflict, and social problems of the modern city, topics which are not single topics of study, but intricate, complex issues. The interdisciplinary nature of the M.A. in liberal studies coursework provides the mechanism to look at these problems, and others, with a deeper understanding of exactly how contemporary problems are interrelated with one another and with past history.

Each semester, the critical choices theme is reflected through the offering of at least one of the following courses:

- A&S 510 Methods of Inquiry: An Interdisciplinary History of the 1930s
- A&S 511 Methods of Inquiry: An Interdisciplinary History of the 1940s
- A&S 512 Methods of Inquiry: An Interdisciplinary History of the 1950s
- A&S 513 Methods of Inquiry: An Interdisciplinary History of the 1960s
- A&S 514 Critical Choices: Methods of Inquiry in Science

Each of these courses is designed to explore, in an interdisciplinary manner, interrelationships among contemporary issues and past history and influences upon contemporary decision making.

Admission to the Program

Individuals admitted to the program must have a baccalaureate or equivalent degree, and mature academic interests. A minimum undergraduate grade-point average of 3.0 is desirable but can be offset by professional and career accomplishments outside academe. Individuals applying for admission to the program also are required to have an in-depth interview with the program director. Approval is required before any student is officially accepted into the program. The director also functions as principal graduate adviser in this program and approves each participant's individual plan of study.

Requirements for Completion of the Degree

The degree is a 36 credit hour program. Generally, each participant's plan of study will consist of three parts; however, exceptions in the plan of study may be approved by the director to accommodate an individual's specific interests or special education or career backgrounds. The three parts of the matriculation plan include:

- Introductory seminar, which must be completed before any other coursework;
- The body of coursework itself; and
- A final capstone seminar, taken during the last semester.

A written thesis is not required, but individuals who wish to complete a thesis project may apply 3 credit hours toward their degree requirements. An individual who works well independently and who has a particular interest that lends itself to detailed research is especially encouraged to consider the thesis option. With the thesis option, the participant will select a faculty adviser other than the director of the program, who will direct the plan of study and research.

Relationship of the MALS to Interdisciplinary Doctoral Degrees

The College of Arts and Sciences has a strong tradition of interdisciplinary studies at both the baccalaureate and doctoral levels.

For the bachelor of arts and bachelor of liberal arts degrees, the College's integrated studies in the humanities curriculum (more commonly known as cluster courses) and the Program for Adult College Education (PACE) are two programs that consist almost entirely of interdisciplinary coursework. At the advanced level of doctoral work, most of the departments in the College participate in the campus Interdisciplinary Ph.D. program, which requires studies in at least two fields.

The M.A. in liberal studies degree continues the tradition of interdisciplinary work in the college at the intermediate level between baccalaureate and doctoral work. In a few cases, students completing this degree may find the transition to doctoral work as the appropriate next step. However, students should recognize that the degree is not designed to provide students in the program with specific subject skills usually associated with targeted career objectives in traditional research areas.

Students interested in coordinating their M.A. in liberal studies coursework with future doctoral work at UMKC are strongly encouraged to make this intent known at the outset of their work. Without initial planning conducted with a committee of doctoral faculty, a student's master's coursework may not be appropriate to later doctoral studies.

Coursework

Program participants begin by enrolling in A&S 509: Critical Choices: Methods of Inquiry into the Liberal Arts. On completion of this required 3 hour introductory seminar, which is described below, participants earn 30 credit hours based on an individual study plan. In advance of each semester, a list will be published of departmental courses open to M.A. in liberal studies participants and offered at night and during the weekends. Program participants are also free to enroll in any other course offered in the College of Arts and Sciences, as long as they meet the entry requirements of the instructor and the department. At the conclusion of the program, individuals enroll in a required 3 hour capstone seminar, A&S 520: Critical Choices: Final Research Project and Capstone Seminar, described later.

A&S 509 Critical Choices: Methods of Inquiry into the Liberal Arts (3 hours)

Offered each fall and winter semester, this required seminar meets four weekends throughout the semester. Team-taught by faculty from the humanities and the social and natural sciences, the class also includes guest presentations by other faculty in various fields and research librarians. The goals of the seminar are:

- Refresh the research skills of adults who may be returning to formal classes for the first time in many years;
- Provide an introduction to a vast array of research resources;
- Refine writing skills; and
- Help each student define his or her area of emphasis within the program.

Sessions introduce participants to the use of the Miller Nichols Library on the main UMKC campus, as well as other area libraries, such as the Linda Hall Library of Science and Technology, the Truman Library, and the Nelson-Atkins Museum of Art. The seminar also studies the different methods and research issues addressed by the humanities, sciences, and social sciences. The seminar also provides opportunity for each student to define an individual research question as a unifying theme in the selection of classes throughout his or her matriculation and as a final project to be investigated in the capstone seminar of the program, A&S 520.

Individual Study Plans (30 hours)

A benefit of the MALS program is that it does not conform to any single fixed curriculum. Individuals develop their own plans of study in consultation with the director of the program or a graduate adviser designated by the program director. No more than three courses (9 hours) may be taken within any one department without permission of the department and the director of the program. Two courses (6 hours) may be taken from another school at the university outside of the College of Arts and Sciences. No more than 12 hours at the 400 level (or 300 level when permitted by the department) can be applied to the plan of study.

Students are free to identify their own areas of study, or to choose from among the following areas of focus:

- Black Studies;
- Communication and Film Studies;
- Executive Leadership; or
- Hospitality Studies.

For students who wish to write a thesis, up to 3 hours may be applied toward the completion of the degree. Students are encouraged to exercise this option concurrently with the capstone seminar or soon after its completion.

A&S 520: Critical Choices: Final Research Project and Capstone Seminar (3 hours)

This course brings together MALS participants in the last semester of their work. Each participant in the seminar defines a final project and spends a semester developing it and presenting the findings to the group at the conclusion of the course. Each project is intended to be thought-provoking, and to cut across disciplinary lines in the examination of a question relevant to the area of emphasis that the student has followed throughout the program. In addition, guest faculty representing the humanities, the social sciences, and the natural sciences help students understand how contemporary issues and problems are interrelated with one another and with past history.

Department of Mathematics and Statistics

206 Haag Hall 5120 Rockhill Road (816) 235-**1641** math@umkc.edu http://www.umkc.edu/math

Mailing Address

University of Missouri-Kansas City Department of Mathematics and Statistics HH 206 5100 Rockhill Road Kansas City, MO 64110-2499

Interim Department Chair:

Bruce S. Bubacz (816) 235-1641

Emeriti Faculty:

George Phillip Barker, Larry Q. Eifler, James M. Foran, James H. Gillilan, Lee Hart, Shirley A. Hill, Thomas P. Kezlan, Paul W. Liebnitz, Jr., Bennie J. Pearson, Elbert M. Pirtle, Jr., Paul J. Vesce, Bruce R. Wenner

Associate Professors:

Jie Chen (principal graduate adviser), Noah H. Rhee (undergraduate director)

Assistant Professors:

Eric J. Hall, Hristo D. Voulov, Yong Zeng Visiting Assistant Professor:

Richard Delaware

Instructor:

Rebecca S. Roberts

Department Description

During academic year 2004-2005, the Department of Mathematics and Statistics will not admit graduate students. At the present time, the faculty are engaged in a comprehensive planning initiative, in consultation with the Dean of the College of Arts and Sciences and other departments and schools at UMKC, that has as its goal a complete redesign of the graduate program. The departments target is to reopen admissions for the 2005-2006 academic year.

The graduate degrees offered by the Department of Mathematics and Statistics are the master of arts and master of science degrees. The department also participates in the UMKC School of Graduate Studies Interdisciplinary Ph.D. program. Qualified students can select mathematics as the coordinating unit or a co-discipline when applying for admission or preparing their plans of study. See the School of Graduate Studies section of this catalog for more information about the Ph.D. program.

These programs are designed to develop the student's knowledge of mathematics itself and to provide the tools and understanding necessary for the study of other scientific and quantitative fields.

The Department of Mathematics and Statistics has institutional memberships in the American Mathematical Society and the Mathematical Association of America.

Advising System

Advising is on an individual basis with senior mathematics faculty members. Appointments for advising may be made by contacting the department or the principal graduate adviser.

Library Resources

In addition to the Miller Nichols Library, the department has full access to the holdings and services of the Linda Hall Library of Science and Technology, a privately endowed

institution of international prominence. The Linda Hall Library subscribes to more than 700 mathematics journals and maintains a large and growing collection of mathematics books.

Graduate Programs

Graduate Admissions

During academic year 2004-2005, the Department of Mathematics and Statistics will not admit graduate students. At the present time, the faculty are engaged in a comprehensive planning initiative, in consultation with the Dean of the College of Arts and Sciences and other departments and schools at UMKC, that has as its goal a complete redesign of the graduate program. The departments target is to reopen admissions for the 2005-2006 academic year.

To be admitted to the graduate program a student must meet the admission requirements found in the General Graduate Academic Regulations and Information section of this catalog, and must have a baccalaureate degree with a major in mathematics or present evidence of strong performance in at least three mathematics courses beyond calculus.

Assistantships and Scholarships

Each year, the department has several graduate teaching assistantships available. Awards in the form of research assistantships, fellowships and scholarships are ordinarily available, and each applicant will be considered for these awards

For further information and application forms for graduate teaching assistantships, write to the address at the beginning of this section.

Master of Arts/Master of Science: Mathematics

During academic year 2004-2005, the Department of Mathematics and Statistics will not admit graduate students. At the present time, the faculty are engaged in a comprehensive planning initiative, in consultation with the Dean of the College of Arts and Sciences and other departments and schools at UMKC, that has as its goal a complete redesign of the graduate program. The departments target is to reopen admissions for the 2005-2006 academic year.

The master's programs give the student broad training in basic higher-level mathematics. In this program, a concentration is available in either pure mathematics or applied mathematics and statistics.

Degree Requirements

No fewer than 30 credit hours of approved coursework are required, and at least 18 credit hours must be at the 500 level. Courses numbered below 400 do not carry graduate credit for mathematics graduate students.

All master's degree candidates must pass a written final examination during the term in which they expect to receive the degree. This examination will stress clarity of expression, precision in fundamental definitions and facility in deducing their immediate consequences. The questions on the written examination will be chosen from the fields of algebra; analysis; probability and statistics; and topology.

Doctor of Philosophy During academic year 2004-2005, the Department of Mathematics and Statistics will not admit graduate students. At the present time, the faculty are engaged in a comprehensive planning initiative, in consultation with the Dean of the College of Arts and Sciences and other departments and schools at UMKC, that has as its goal a

complete redesign of the graduate program. The departments target is to reopen admissions for the 2005-2006 academic year.

UMKC offers an Interdisciplinary Ph.D. program. Students desiring to study at the doctoral level in mathematics must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific requirements appears in the School of Graduate Studies section of this catalog.

Mathematics Courses

509 General Algebra I (3). Groups, rings, modules, homology, fields and Galois theory, valuations, matrices, and multilinear algebra. Prerequisite: Math 410 or equivalent. Note: Continued in Math 519.

510 Complex Variables I (3). The group of linear fractional transformations, complex integration, Cauchy's theorem, the maximum modulus theorem, analytic continuation, Riemann surfaces. Prerequisite: Math 412. Note: Continued in Math 520.

513 Real Variables I (3). Theory of measure with applications to analysis. Riemann and Lebesgue integration. Prerequisite: Math 412. Note: Continued in Math 523.

517 Matrix Theory I (3). Geometrical consideration: norms, inner products and orthogonality. Linear systems, inverses and generalized inverses of matrices, idempotent and projection matrices. Linear and quadratic forms. Matrix differentiation. Kronecker products and related operators. The course is oriented toward matrix theory as it is used in statistics. Prerequisites: Math 402, 420 (or Math 300 and consent of instructor)

519 General Algebra II (3). Continuation of Math 509.

520 Complex Variables II (3). Continuation of Math 510.

523 Real Variables II (3). Continuation of Math 513.

530 Axiomatic Set Theory (3). Zermelo-Fraenkel set theory, transfinite induction equivalents of the axiom of choice, cardinal and ordinal arithmetic, the generalized continuum hypothesis, inaccessible cardinals.

532 Advanced Numerical Analysis I (3). Error Analysis, Solving Systems of Linear Equations, Solutions of Nonlinear Equations, the Least-Squares Problems, and Approximating functions. Prerequisite: Math 402 and 420 or consent of instructor. Note: Continued in Math 542.

537 Mathematical Statistics I (3). Probability theory, distribution functions, sampling, statistical inference, topics in advanced applied statistics. Prerequisite: Math 402 or consent of the instructor. Note: Continued in Math 547.

542 Advanced Numerical Analysis II (3). Eigenvalues and Eigenvectors, Linear Programming, Optimization, Numerical Differentiation and Integration, Numerical Solution of Ordinary and Partial Differential Equations. Prerequisite: Math 532 or consent of instructor. Note: Continuation of Math 532.

547 Mathematical Statistics II (3). Continuation of Math 537.

552 General Topology I (3). Topological spaces, Cartesian products, connectedness, quotient spaces, separation axioms, covering theorems, metric spaces, convergence, compactness, uniform spaces, function spaces, homotopy, fiber spaces. Prerequisite: Math 450 or consent of instructor. Note: Continued in Math 562.

557 Functional Analysis (3). Normed linear spaces, linear functionals and linear operators. The Hahn-Banach, uniform boundedness and closed graph theorems. Convexity and extreme points. Hilbert spaces and spectral theory. Prerequisites: Math 412 and 420

590 Special Topics (1-3). Selected topics in various fields of mathematics. May be repeated for credit when the topic varies. Prerequisite: Consent of instructor.

699 Research and Thesis (1-16). Doctoral dissertation.

Department of Physics

257 R.H. Flarsheim Hall 5110 Rockhill Road (816) 235-**1604** Fax: (816) 235-**5221** physics@umkc.edu http://www.umkc.edu/physics

Mailing Address

University of Missouri-Kansas City Department of Physics RHFH 257 5100 Rockhill Road Kansas City, MO 64110-2499

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David M. Wieliczka

Curators' Professor:

Wai-Yim Ching

Professors Emeriti:

Paul J. Bryant, Marvin R. Querry (curators'), George A. Russell (president emeritus), John R. Urani

Professors:

Y.C. Jerry Jean (chemistry and physics), Michael B. Kruger, Richard D. Murphy, James M. Phillips, David M. Wieliczka (chair), Da-Ming Zhu (graduate director) Associate Professors:

Fred M. Leibsle (undergraduate director), Jerzy M. Wrobel

Associate Professor Emeritus:

James R. Beacham, Richard C. Waring Assistant Professors:

Keith M. Ashman (observatory director), Elizabeth P. Stoddard (director, Mathematics and Physics Institute)

Description of Department/Programs

The Department of Physics offers the bachelor of science and bachelor of arts degrees. These degrees can be obtained using a traditional program of study suggested for students interested in advancing to graduate school or using a program emphasizing the use of laboratory instrumentation. Additionally, the department participates in an interdepartmental major in history and philosophy of science, along with the departments of philosophy, mathematics and history.

The department offers a master of science degree in physics with thesis and non-thesis options.

The Department of Physics is eligible for full participation in UMKC's Interdisciplinary Ph.D. program. Qualified students can select physics as a discipline when applying for admission or preparing their doctoral program of study. (See the School of Graduate Studies section of this catalog for details about the Interdisciplinary Ph.D. program.)

Many physics courses are offered in the late afternoon or evening to accommodate part-time students.

Graduate Degree Programs

The department offers an M.S. in physics with thesis and non-thesis options. The Department of Physics is an academic discipline eligible for full participation in UMKC's Interdisciplinary Ph.D. program. Qualified students can select physics as their coordinating unit or co-discipline when applying for admission or preparing their Ph.D. plan of study. A separate brochure, available from the department, describes the graduate programs in more detail.

Graduate Admissions

To be admitted to the graduate program, a student must meet the general admission requirements for the School of Graduate Studies and have undergraduate preparation in physics. An undergraduate major in physics is not required, and deficiencies in completed coursework may be overcome by taking additional undergraduate-level courses for graduate credit. Applicants are encouraged to take both the Graduate Record Examination (GRE) aptitude test and physics test. International students must take the Test of English as a Foreign Language (TOEFL). Admission will be based on academic record and other information such as letters of reference, GRE score and personal interview. See the School of Graduate Studies section in this catalog for requirements for admission to the Interdisciplinary Ph.D. program.

Career Implications of the Master's Degree

The master's degree programs in physics are intended to serve the following groups:

- Those who wish to obtain a master of science degree but do not expect to go further in graduate work;
- Those who intend to work toward a Ph.D. in physics after obtaining the M.S. degree;
- Those who wish to take graduate courses in physics as part of a program in some other discipline or for educational or professional reasons;
- Those who wish to obtain an Interdisciplinary Ph.D. degree from UMKC in two or more academic disciplines, one of which is physics.

The career implications for students with an M.S. degree in physics and seeking employment are similar to those with B.S. degrees, but they will have a more advanced standing and experience in science department activities.

A student who is entering the graduate program with the objective of earning a master of science degree will select or be assigned an adviser. This assignment should be made during the first semester, if possible. Together, the student and the adviser will work out the complete program of study for the master of science degree. Students entering UMKC's Interdisciplinary Ph.D. program, and choosing physics as one of their academic disciplines, must follow the academic regulations of the School of Graduate Studies as set forth in the School of Graduate Studies section in this catalog. All graduate students in physics who have completed more than 6 graduate credit hours must take a departmental examination in April.

Scholarships, Fellowships and Assistantships

Financial support is available through fellowships, teaching assistantships, research assistantships or hourly student wages. Students wishing to be considered for an assistantship must so specify in their letters and application forms.

Master of Science

Description of the Program

The master of science degree may be earned by fulfilling the requirements for the master of science with thesis or the master of science without thesis.

A full-time graduate student seeking a master of science degree will normally be expected to take the thesis option. The without-thesis option is mainly designed for part-time students who already have career employment.

The following five graduate-level courses are defined as core courses for the M.S. All graduate students should take these courses as soon as possible after admission to graduate study.

Physics 500: Mathematical Physics I Physics 510: Theoretical Mechanics I Physics 520: Electromagnetic Theory I Physics 530: Quantum Mechanics I Physics 540: Statistical Physics I

Requirements of the Major

In addition to requirements set by the School of Graduate Studies, the following requirements must be satisfied for graduation:

Requirements for the M.S. Degree With Thesis

- 1. 30 graduate credit hours with the following constraints:
 - At least 12 credit hours of M.S. core courses;
 - A maximum of 6 credit hours for the thesis (Physics 599);
 - No more than 9 credit hours of 400-level courses;
- 2. A comprehensive written examination covering all basic areas of undergraduate and graduate physics;
- 3. A satisfactory thesis;
- 4. A final oral examination.

Requirements for the M.S. Degree Without Thesis

- 1. 36 graduate credit hours with the following constraints:
 - 15 credit hours of core M.S. courses;
 - No more than 6 credit hours of 400-level physics courses and no more than 6 credit hours of non-physics courses without the approval of the supervisory committee;
- 2. A comprehensive final written examination covering all areas of basic undergraduate and graduate physics.

All graduate students must maintain a grade-point average of 3.0 (A = 4.0). A student who chooses the thesis option must maintain satisfactory progress on a research project. There are no language requirements for the M.S. degree.

Graduate students should consult with the principal graduate adviser prior to enrollment.

Interdisciplinary Ph.D. Program Regulations

Regulations

The Department of Physics is a full participant in the Interdisciplinary Ph.D. program. The doctoral studies committee of the department has the primary responsibility for administering the program within the department. The committee consists of all physics doctoral faculty members with an elected committee chairperson.

See the School of Graduate Studies section in this catalog and the departmental graduate brochure for general and discipline-specific regulations for Interdisciplinary Ph.D. study with physics as a coordinating unit discipline or co-discipline.

Physics Courses

500 Methods of Mathematical Physics I (3). Intended to provide the student with the advanced mathematical techniques needed for beginning graduate studies in the physical sciences. Content includes real variables, infinite series, complex analysis, linear algebra and partial differential equations. Offered: Fall.

501 Methods of Mathematical Physics II (3). A continuation of Physics 500 which includes Sturm-Liouville operators, special functions, Fourier transforms, distributions and Green functions, Laplace transforms, linear groups and tensor analysis. Offered: Winter.

505 Survey of Recent Development in Physics (3). Specifically designed to help high school and junior college science teachers keep pace with current developments in various subdivisions of physics and their impact on society and technology. (Not applicable for graduate degree in Physics). Prerequisite: Baccalaureate degree and one year science teaching experience. Offered: On Demand.

510 Theoretical Mechanics I (3). A review of undergraduate mechanics precedes the study of generalized classical mechanics in this course. Topics include variational principles, Lagrangian and Hamilton methods, conservation laws and Hamilton-Jacobi theory. Offered: Fall.

511 Theoretical Mechanics II (3). A continuation of Physics 510, this course covers topics such as normal coordinates, small oscillations, continuum mechanics and special/general relativity. Offered: On Demand.

520 Electromagnetic Theory and Applications I (3). Electrostatics, magnetostatics and various approaches in solving boundary value problems of electromagnetism, Green's functions, conformal transformations and polynomial expansions, Maxwell's equations and waves. Offered: Winter

521 Electromagnetic Theory and Applications II (3). Waveguides, fiberoptics, radiation systems and antenna for wireless communications, scattering and diffraction of electromagnetic waves, multipole fields, special relativity and relativistic particle dynamics and radiation. Offered: Fall

530 Quantum Mechanics I (3). Review of elementary methods, formal preliminaries, axioms, commuting operators, angular momentum, static perturbation theory, Wigner-Eckart theorem. Offered: Fall.

531 Quantum Mechanics II (3). Time dependent perturbation theory, scattering, applications to atoms, molecules and nuclei, reactions, relativistic methods. Offered: Winter.

535 Optical Properties of Matter (3). Maxwell's equations and the dielectric function, absorption and dispersion, free-electron metals, interband transitions, dispersion relations and sum rules, self-consistent field approximation, current-current correlations and the fluctuation-dissipation theorem, plasmons and characteristic energy loss. Prerequisites: Physics 450, 460, 461, 471, 472, 500. Offered: Alternate Years Fall.

540 Statistical Physics I (3). Statistical mechanics as a basis for thermodynamics; classical distribution functions; quantum statistical mechanics, kinetic theory, transport phenomena; application to systems of interacting particles. Prerequisites: Physics 410, 471, 472. Offered: Alternate Years Winter.

541 Statistical Physics II (3). Special topics in advanced statistical physics including: second quantization, modern many body theory, interacting Fermi and Bose systems, superfluidity and superconductivity, renormalization group and computer simulation techniques. Prerequisite: Physics 540. Offered: On Demand.

550 Atomic and Molecular Structure (3). Experimental results and theoretical models by quantum mechanics. Special emphasis on the interaction between radiation and matter. Offered: Alternate Years Winte

560 Nuclear Physics (3). Fundamental properties of the atomic nucleus discussed in terms of experimental results and theoretical models. Quantum and statistical mechanics are used where appropriate. Offered: On Demand.

570 Quantum Theory of Solids I (3). Lattice dynamics and thermal conductivity. Neutron scattering. Symmetry principles in crystals and consequences. Point group, space group and irreducible representations. Energy band theory and methods of band calculation. Elementary Theory of Magnetism. Spin wave theory. Offered: Alternate Years Winter.

571 Quantum Theory of Solids II (3). Topics will include crystal imperfections, impurities and defects, optical properties of metals and semiconductors, electron-lattice interaction and transport theory, superconductivity and theory of disordered systems. Offered: Alternate Years Fall.

580 Physics Seminar (1). Contemporary publications and research.

590 Topics in Physics (1-3). Contemporary publications and research.

595L Computer Interfacing Laboratory (3). An introduction to computer interfacing through the use of serial and parallel ports and digital-to-analog and analog-to-digital converters. The course also introduces digital filtering techniques, data analysis techniques, and graphical presentation of data. The programming techniques are taught using high level programming languages currently used in research and development labs.

599 Research and Thesis (1-9). Research for thesis in partial fulfillment of the master's degree in physics.

630 Advanced Quantum Theory (3). Scattering theory and reactions, relativistic quantum mechanics and quantum field theory, many-body problems and Green functions. Prerequisites: Physics 530-531 or consent of instructor. Offered: Alternate Years Fall.

680 Research Seminar (1-2). Seminars on current research topics of research programs in the department and those of external distinguished scientists. (Must be taken by Physics Ph.D. students). Offered: Fall and Spring.

690 Special Research Topics (1-3). A lecture course presenting advanced research-level topics. Prerequisite: Ph.D. candidacy or consent of instructor. Offered: On Demand. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

699 Research and Dissertation (1-9). Research for dissertation in partial fulfillment of the Ph.D. degree requirements in physics.

Department of Political Science

213 Haag Hall 5120 Rockhill Road (816) 235-**1326** Fax: (816) 235-**5594** pol-sc@umkc.edu http://www.umkc.edu/pol-sc

Mailing Address

University of Missouri-Kansas City Department of Political Science HH 213 5100 Rockhill Road Kansas City, MO 64110-2499

Department Chair:

Harris G. Mirkin

Emeriti Faculty:

G. Ross Stephens, Ben L. Martin, Dale A. Neuman Curators' Professors:

David N. Atkinson (pre-law adviser), Max J. Skidmore (principal doctoral adviser)

Professor:

Robert E. Gamer

Associate Professors:

Robert K. Evanson (principal master's adviser), Harris G. Mirkin

Assistant Professors:

Martha Kropf

Visiting and Adjunct Professors, Full-time Lecturers: Mohammed Hafez, Robert Wolff, Reginald L. Bassa, Jr. (director, Program for Adult College Education)

Department Description

The Department of Political Science offers courses leading to the degrees of bachelor of arts and master of arts, and participates in the Interdisciplinary Ph.D. program.

The undergraduate major in political science is based on the principles of a liberal arts education, with special attention devoted to philosophies, institutions, processes and behavioral aspects of politics.

Master of Arts: Political Science

The master of arts degree in political science offers intensive study across the range of major subfields in politics and government. Because of the breadth of its focus, the M.A. is designed as a terminal degree for most students.

Admission

To be admitted as a regular graduate student in political science, an applicant must have an adequate background in the social sciences. An undergraduate degree in political science is recommended but not required. The department does require applicants to have earned a 3.0 grade-point average in their last 60 credit hours of undergraduate coursework as well as in their major field of study.

The application process is competitive. Satisfying minimum criteria does not guarantee admission to the graduate program; students are admitted according to their rank in the applicant pool and the adequacy of departmental resources. Applicants must submit:

- A completed UMKC application for admission;
- Official transcripts of all previous college work;
- Scores from the Graduate Record Examination (General);
 A latter of application to the principal master's advisor
- A letter of application to the principal master's adviser expressing personal plans and interests in graduate work in political science;

• Two letters of recommendation from professors, employers or others qualified to assess academic potential.

All application materials should be sent to the UMKC Office of Admissions for transmittal to the Department of Political Science for an admissions decision.

Applicants whose records do not meet the requirements of undergraduate academic performance or whose application submissions are incomplete may be admitted as non-regular graduate students, depending on individual circumstances. Only regular graduate students may apply for the M.A. degree. Admission under any circumstances is no guarantee of retention.

Career Implications

Consult with the principal master's adviser for details on the variety of career opportunities enhanced by the M.A. in political science.

Requirements for Retention

Graduate students are expected to maintain a high degree of academic excellence. After completion of 9 credit hours of coursework in political science at UMKC, the academic performance and status of each student will be reviewed by the faculty and a departmental decision will be made as to retention of the student in the graduate program.

Students whose grade-point averages fall below 3.0 (B) for more than two semesters may be dropped from the program. A 3.0 grade-point average is required for graduation.

Temporary grades of "incomplete" will be granted only rarely by political science faculty, only in extraordinary circumstances beyond the control of the student, and only if there are reasonable expectations that the work can be completed. Except in thesis courses, all grades of incomplete will be automatically converted to F's after one year.

The faculty of the Department of Political Science views plagiarism and academic dishonesty as inexcusable. Any student found guilty of these will be dropped from the program.

Students also should consult the School of Graduate Studies section in this catalog for general academic regulations that apply to all graduate students at UMKC.

Requirements for Graduation

The master of arts degree in political science requires the successful completion of either of the following sets of requirements:

- Non-Thesis Option 33 semester hours of approved coursework.
- Thesis Option 24 semester hours of approved coursework and 6 hours of thesis (Political Science 599: Research and Thesis). Students must gain permission to write a thesis. An oral defense of the thesis is required. Those who anticipate further graduate work toward the doctorate are advised to write a thesis.

All M.A. candidates must successfully complete Political Science 680 (Traditions, Theories and Trends in Political Science). For a 300- or 400-level course to be accepted for graduate credit, students will be expected to do supplementary work (additional reading, projects, papers and contact hours with instructor) and to demonstrate graduate-level competency and achievement in the subject, and the students must take the course for graduate credit and complete it with a grade of B or better.

No more than 9 credit hours of 300- or 400-level coursework taken for graduate credit will count toward the M.A. in political science. No course taken for undergraduate credit at UMKC may be repeated for graduate credit. In either the 30-hour thesis option or the 33-hour non-thesis option, no more than 6 hours of "readings," "independent study" or "directed studies" credit (other than thesis hours) may be counted toward the requirements for the M.A.

No more than 6 hours of approved credit may be transferred from another recognized graduate school, and no more than 6 hours of pre-approved graduate coursework in other UMKC departments will be accepted toward the degree.

Students should consult the principal masters adviser in selecting approved courses to assure progress toward completion of the degree and to meet their needs and interests in graduate study.

Political Science Courses

505 Scope and Methods of Political Science (3). This seminar surveys the various descriptive and quantitative approaches to the study of politics, government and public policy. It covers the methods used in various sub-disciplines and the models employed in political analysis.

513 Comparative Politics: Asia, Africa, and Latin America (3). A comparison of politics in selected countries from one or more of these regions, with an emphasis on how and why processes differ and change.

521 Judicial Politics (3). This course addresses broad trends of current research in the area of the judicial process based on empirical studies and the various methodological tools currently used by researchers. Case studies may be used to illustrate in depth the institutional aspects of the judicial process. Biographies may also be used to emphasize the personal and environmental factors which affect judicial decision making.

522 Seminar in the Presidency (3). Critical examination of the American presidency, with in-depth research into selected themes and presidents. Prerequisites: Political Science 406 or permission.

524 Urban Politics (3). A seminar on politics and government in urban areas with special attention to community leadership, power structures, interest group and party activity, political behavior, and movements toward local government reform.

530 International Relations (3). This course examines major schools of thought that attempt to explain contemporary and historical international politics. Topics discussed include international systems, the balance of power, collective security, and international political economy, morality, and law.

541 American Political Thought (3). This course will focus on intellectual reactions to the major periods in American history (the movement for independence, the writing of the constitution, the Jacksonian period, the civil war debate, the growth of big business, the rise of the positive state and contemporary America). Contemporary theorists will be included along with Jefferson, Madison, Hamilton and Marshall.

542 Constitutional Interpretation (3). This course will provide an in-depth treatment of selected areas of constitutional development, related to various aspects of public policy developed under the Constitution through judicial interpretation, including federalism, equality, fundamental rights and freedom of expression.

570 The Politics of Social Security (3). This course will concentrate upon the principles of social insurance in general, and of the American Social Security system in particular. It will consider the system in relation to the history and traditions of American society. It will analyze popular misconceptions and will pay special attention to the political, economic, and demographic issues relevant to Social Security's current operation and to the program's future.

575 Political Ideologies (3). Consideration of political ideologies and their effects, with in-depth research into selected topics.

580 Government and Politics Seminar (3). Offered as a special seminar in the individual faculty member's area of research specialization. The seminar may be repeated for credit when the topic varies. The topic and instructor will be announced in advance.

590 Directed Studies and Research (1-6). Under the direction of the instructor, students in this course will produce a major research paper: a self-contained thesis chapter, an article for publication or the equivalent. May be repeated for credit.

599 Thesis (1-6). Directed specialized research.

680 Traditions, Theories, and Trends in Political Science (3). This intensive survey of political science provides an opportunity for integration of the study of political values, behavior, and institutions with other social sciences.

697 Doctoral-level Independent Readings (3). Individual readings under the supervision of members of the Political Science Graduate or Doctoral Faculty in the specified topic or topics. May be repeated. May not be taken during an academic year in which a graduate course or seminar is offered on the topic.

697A Doctoral-Level IR: American National Politics and Institutions (3). 697I Doctoral-Level IR: International Politics and Processes (3). 697L Doctoral-Level IR: Public Law (3).

697O Doctoral-Level IR: Public Opinion and Voter Behavior (3).

697R Doctoral-Level IR: Research Methods (3).

697T Doctoral-Level IR: Political Theory (3).

697U Doctoral-Level IR: Urban and State Politics (3).

699 Research and Dissertation (1-12). Directed specialized research.

Department of Psychology

4825 Troost Avenue, Suite 215 (816) 235-**1318** (816) 235-**1062** (FAX) (816) 235-**1092** (Undergraduate Advising) psychology@umkc.edu http://www.umkc.edu/psychology

Mailing Address

University of Missouri-Kansas City Department of Psychology 5100 Rockhill Road Kansas City, MO 64110-2499

Department Chair:

¹ Diane L. Filion

Professor:

R. Chris Martin

Associate Professors:

Diane L. Filion (department chair and director of undergraduate program), Leah K. Gensheimer, Kathleen J. Goggin (director master's program), C. Keith Haddock, Jay Hewitt, Joseph Hughey (discipline coordinator psychology, interdisciplinary Ph.D.), Tamera Murdock, Sharon Gross Portwood, W.S. Carlos Poston II, Lisa Terre Assistant Professors:

Delwyn Catley (interim co-director of clinical training), Linda Garavalia, Christopher Lovelace, Marne L. Sherman (interim co-director of clinical training)

Department Description

The Department of Psychology is focused on behavioral science contributions to health and health care. Our faculty members are national and international leaders in research on areas such as HIV/AIDS, tobacco use, obesity and eating disorders, cancer, neuropsychological functioning, safety and violence, and community factors in health. We have strong and active collaborations with important community partners such as Saint Lukes Hospital, The Cancer Institute, Mid America Heart Institute, the Kansas City Free Clinic, University of Kansas Medical Center, and Truman Medical Center. At the undergraduate level, the department offers a general program of study leading to the bachelor of arts degree in psychology. A psychology minor is available to students majoring in other disciplines. Graduate programs are offered by the department which lead to the master of arts and the doctor of philosophy degrees.

Psychology participates in the Interdisciplinary Ph.D. program of the School of Graduate Studies with two disciplines, psychology and health psychology. See the School of Graduate Studies section of this catalog for more information about doctoral programs in the Interdisciplinary Ph.D. program.

Career Implications of the Degree

Psychology is a broad discipline incorporating material from the natural sciences, other social sciences and the humanities. The study of psychology entails an examination of the human condition that is relevant to a wide range of occupations. A psychology major serves as the basis for an excellent liberal arts education and also serves as an excellent introduction to the world of scientific inquiry. Psychology students learn about the important concepts that underlie current scientific thought and they receive training in the application of psychological research methods.

The educational background obtained by a student majoring in psychology will prove useful in a variety of professional settings and will provide adequate preparation for entry-level positions in a variety of fields. Graduates with bachelor's degrees in psychology have established careers in such diverse areas as:

- Business and industry;
- Child care;
- General health care;
- Gerontology;
- Mental health services;
- Probation and parole;
- Public relations and marketing;
- Research, or laboratory assisting;
- Services for the developmentally disabled;
- Social services.

For students interested in pursuing a career in the field of psychology, a psychology major is clearly a logical beginning. There are positions available to job candidates with bachelor's degrees in psychology; however, most professional opportunities in psychology require advanced degrees (master's, specialist, doctorate). Students who want to pursue a career in psychology are advised to prepare for graduate study. The psychology major at UMKC offers a solid educational foundation for students who plan to work toward advanced degrees in the field.

Financial Aid

Part-time graduate teaching and research assistantship positions are available in the department. Students interested in GTA/GRA positions should contact the department chair. In addition, information is available about positions in the community in areas related to psychology.

Department Activities

Honor Society

The department has a chapter of Psi Chi, the national honor society in psychology. Each year Psi Chi presents a variety of educational and social programs. Membership is open to students at both undergraduate and graduate levels. Regular meetings are held throughout the academic year. Interested students should contact Dr. Diane Filion, program adviser, at (816) 235-1061.

Advising System

Psychology advisers are available to students for advisement, declaration of major and degree checks. The adviser solves special problems and is the central records source. The adviser holds office hours during the semester and is available by appointment.

Master of Arts: Psychology

Director:

Kathleen J. Goggin

Program Description

The master of arts in psychology program prepares students for careers that require the application of psychological principles to the workplace or community settings. The program is grounded in the scientist-practitioner model and thus involves training in theory, research design and statistics, and the application of principles to real world situations. The program provides advanced training both for recent graduates and for individuals who have been in the work force for a number of years. Although some students subsequently enter doctoral programs and complete Ph.D.s, many immediately accept challenging jobs in the public, private, or non-profit sector. Students may complete the program on a full- or part-time basis, however to ensure the timeliness of training, all program requirements must be completed within 5 years from admission. There are two program concentrations reflecting the strengths of our faculty:

- Quantitative Methods and Research Design, and
- Health Psychology.

Both concentrations offer thesis and non-thesis options. The program is research oriented and provides many opportunities to gain valuable experience in conducting research, and including experimental studies working with human participants in a variety of areas. Please see faculty interests and on-going projects on the departmental home page (http://www.umkc.edu/psychology).

The program is not designed to prepare individuals to become professional counselors.

Thesis Option:

Those students who hope to pursue additional graduate training (i.e., Ph.D.) are strongly encouraged to select the thesis option. Students who select this option work closely with their M.A. thesis adviser to develop an empirical project, which is evaluated and approved by a committee chosen by the student and his/her adviser. Students are expected to work independently during all aspects of the thesis, including design, data collection, analysis, and write-up. A final report is written by the student, approved by the thesis committee, and submitted to the Graduate School for credit towards the master's degree. The thesis must fulfill the requirements of the School of Graduate Studies, described in the Graduate Catalog. A minimum of 30 credit hours are required.

Non-Thesis Option:

Those students who seek to immediately apply their skills in work settings and do not plan to pursue additional graduate training (i.e., Ph.D.) are encouraged to select the non-thesis option. A minimum of 36 credit hours are required.

Graduate Admissions

The M.A. program admits students once a year in the fall semester (Application Deadline: January 15th). Please visit the departments Web site (www.umkc.edu/psychology) for information on applying and Frequently Asked Questions.

Decisions regarding admission are made by a faculty committee on the basis of undergraduate grades, GRE scores and letters of recommendation. A minimum cumulative undergraduate grade-point average of 3.0/4.0, and a minimum average of 3.25/4.0 in psychology coursework is required. Minimum General GRE scores in the range of 900-1000 (verbal + quantitative) are expected.

A bachelors degree is required for admittance. A B.A./B.S. in psychology is preferred but not required. In order to ensure that students are properly prepared for graduate work in psychology, applicants are expected to have satisfactorily completed at least 9 hours of foundational courses in the field. Completion of undergraduate courses in the following areas is required:

- General Psychology
- Experimental Methods / Research Design
- Statistics / Quantitative Methods

Completion of courses in at least two of the following seven areas is also strongly recommended:

- Abnormal Psychology
- Child Psychology
- Cognition
- Learning
- Personality
- Sensation and Perception
- Social Psychology

Suggested Plan of Study

Concentration in Quantitative Methods/Research Design:

The Quantitative Methods/Research Design concentration is designed for those students who seek rigorous training in research design, implementation, and statistical analysis. Aquiring skills in these areas will prepare students for additional graduate training as well as for immediate application in a work setting. Quantitatively skilled professionals are employed in a variety of settings including: university departments such as psychology, marketing, management, and education, medical and biological research programs, personnel management programs, government, industry, market research firms, large-scale mental testing corporations, software development companies, and consulting firms.

One key component of training is 6 credit hours of Research and Thesis (thesis option) or Directed Research (non-thesis option) in which students will, under the direct supervision of faculty, apply the skills that they have learned in the classroom to real-world problems and research questions. With the support of their faculty mentor, students in the non-thesis option can collaborate with other professionals outside of the department to establish working relationship that might lead directly to employment opportunities.

Quantitative Methods/Research Design

Thesis Option	:	Hours
	Advanced Quantitative Methods	3
PSYCH 517		5
101011011	Multivariate Analysis	3
PSYCH 538	Development and Evaluation of	5
151011550	Assessment Tools	3
PSYCH 601	Experimental Methods in	
	Design and Analysis I	3
PSYCH 625	Health Research Methods: Intro. to	
	Epidemiology & Clinical Trials	3
PSYCH 599	Research and Thesis	3 6 3 6
Psychology E	Elective*	3
Electives**		6
Total		3 0
Non-Thesis O	ption:	Hours
Non-Thesis O PSYCH 516		Hours 3
PSYCH 516	Advanced Quantitative Methods	
PSYCH 516	Advanced Quantitative Methods Multiple Regression and	3
PSYCH 516 PSYCH 517	Advanced Quantitative Methods Multiple Regression and Multivariate Analysis	
PSYCH 516	Advanced Quantitative Methods Multiple Regression and Multivariate Analysis Development and Evaluation of	3 3
PSYCH 516 PSYCH 517 PSYCH 538	Advanced Quantitative Methods Multiple Regression and Multivariate Analysis Development and Evaluation of Assessment Tools	3
PSYCH 516 PSYCH 517	Advanced Quantitative Methods Multiple Regression and Multivariate Analysis Development and Evaluation of Assessment Tools Experimental Methods in	3 3 3
PSYCH 516 PSYCH 517 PSYCH 538 PSYCH 601	Advanced Quantitative Methods Multiple Regression and Multivariate Analysis Development and Evaluation of Assessment Tools Experimental Methods in Design and Analysis I	3 3
PSYCH 516 PSYCH 517 PSYCH 538 PSYCH 601	Advanced Quantitative Methods Multiple Regression and Multivariate Analysis Development and Evaluation of Assessment Tools Experimental Methods in Design and Analysis I Health Research Methods: Intro. to	3 3 3 3
PSYCH 516 PSYCH 517 PSYCH 538 PSYCH 601	Advanced Quantitative Methods Multiple Regression and Multivariate Analysis Development and Evaluation of Assessment Tools Experimental Methods in Design and Analysis I	3 3 3 3
PSYCH 516 PSYCH 517 PSYCH 538 PSYCH 601 PSYCH 625 PSYCH 590	Advanced Quantitative Methods Multiple Regression and Multivariate Analysis Development and Evaluation of Assessment Tools Experimental Methods in Design and Analysis I Health Research Methods: Intro. to Epidemiology & Clinical Trials Directed Research	3 3 3 3 3 6 9
PSYCH 516 PSYCH 517 PSYCH 538 PSYCH 601 PSYCH 625	Advanced Quantitative Methods Multiple Regression and Multivariate Analysis Development and Evaluation of Assessment Tools Experimental Methods in Design and Analysis I Health Research Methods: Intro. to Epidemiology & Clinical Trials Directed Research	3 3 3

* Psychology electives must be 500 level or above, unless prior written approval is obtained from your psychology adviser and the course instructor. Documentation of completion of additional work in undergraduate courses must be filed with the department in order to obtain graduate credit. ** Courses at the 500 level or above from other UMKC departments may be used to fulfill these requirements; however, prior written approval from your psychology adviser is required.

Concentration in Health Psychology:

The Health Psychology concentration offers students the opportunity to develop an understanding of the impact of behavioral, biological, cognitive, environmental, and social variables on mental and physical health. Drawing on the research strengths of our faculty, students can prepare for Ph.D. programs in a variety of areas. The concentration is particularly appropriate for students who need advanced work to strengthen their profiles in preparation for application to Ph.D. programs, or for those who wish to explore graduate-level work before making a commitment to Ph.D. training. Students take core classes in the major areas of Health Psychology and can develop expertise in a chosen area via additional course selections and research.

Health Psychology

Thesis Option:		Hours
PSYCH ⁵ 16	Advanced Quantitative Methods	3
PSYCH 517	Multiple Regression and	
	Multivariate Analysis	3
PSYCH 601	Experimental Methods in	
	Design and Analysis I	3
PSYCH 625	Health Research Methods: Intro. to	
	Epidemiology & Clinical Trials	3
PSYCH 631	Theoretical Foundations of	
	Health Psychology	3
PSYCH 599	Research and Thesis	6
	ective (Select one)	3
PSYCH 504	Contemporary Issues in Learning	
PSYCH 505	Motivation	
	Cognitive Psychology	
PSYCH 518	Advanced Biopsychology	
PSYCH 538	Development and Evaluation of	
151011550	Assessment Tools	
DSVCH 612	Program Evaluation and	
F51CH 012		
	Research Dissemination	2
Psychology El	ective (Select one)	3
PSYCH 512	Contemporary Issues in	
	Social Psychology	
PSYCH 522	Contemporary Issues in	
	Developmental Psychology	
PSYCH 523	Seminar Personality Theory	
	and Methodology	
PSYCH 533	Psychopathology	
PSYCH 638	Seminar in Health Care Leadership	
Psychology El		3
Total	centre	30
Non-Thesis Op		Hours
PSYCH 516	Advanced Quantitative Methods	3
PSYCH 517	Multiple Regression and	
	Multivariate Analysis	3
PSYCH 601	Experimental Methods in	
	Design and Analysis I	3
PSYCH 625	Health Research Methods: Intro. to	
	Epidemiology & Clinical Trials	3
PSYCH 631	Theoretical Foundations of	
101011001	Health Psychology	3
PSYCH 590	Directed Research	6
		3
PSYCHOLOGY EI	ective (Select one)	5
POVCU 505	Contemporary Issues in Learning	
PSYCH 505	Nouvation	
PSYCH 507	Cognitive Psychology	
PSYCH 518	Advanced Biopsychology	
PSYCH 538	Development and Evaluation of	
	Assessment Tools	
PSYCH 612	Program Evaluation and	
	Research Dissemination	

Psychology Elec	tive (Select one)	3
PSYCH 512	Contemporary Issues in	
	Social Psychology	
PSYCH 522	Contemporary Issues in	
	Developmental Psychology	
PSYCH 523	Seminar Personality Theory	
	and Methodology	
PSYCH 533	Psychopathology	
PSYCH 638	Seminar in Health Care Leadership	
Psychology Elec	tive*	3
Electives**		6
Total		36

* Psychology electives must be 500 level or above, unless prior written approval is obtained from your psychology adviser and the course instructor. Documentation of completion of additional work in undergraduate courses must be filed with the department in order to obtain graduate credit. ** Courses at the 500 level or above from other UMKC departments may be used to fulfill these requirements; however, prior written approval from your psychology adviser is required.

Requirements for Retention

A detailed list of requirements for retention can be found in the Master of Arts in Psychology Degree Program handbook.

Doctor of Philosophy: Clinical Program (Health Emphasis)

Interim Co-directors of Clinical Training: Delwyn Catley and Marne Sherman

The psychology Ph.D. is a full-time clinical program of graduate study that provides professional education in the entry-level science and practice of clinical psychology. Within this broader context, the program also integrates clinical and epidemiological research with the health and life sciences, providing science-practice training in clinical health psychology. Based on a scientist practitioner model, the program seeks to enhance the public health, broadly defined, through rigorous training of students (education mission); provide an accessible resource for the integration of behavioral sciences and health research and healthcare (service mission); develop knowledge and enhance health outcomes through empirical research (research and evaluation mission); and incorporate integrity and respect for human and intellectual diversity in all our activities (human mission). The programs clinical training and services are grounded in a commitment to the integration of science and practice. Program faculty and students are actively involved in communities and healthcare systems to promote a high quality of life for all.

Admission Criteria

The program is designed for bachelor's-level and master's-level applicants. New students are considered for admission in fall semester only. The application deadline is January 15. Applications must be postmarked on or before January 15 in order to be accepted.

The following minimum requirements are recommended for admission:

- 1. Typically applicants should have a B.S. or B.A. in a Psychology, Counseling, Special Education, or other health-related discipline such as Pre-Med or Nursing;
- Undergraduate GPA of 3.0 and graduate GPA of 3.5. Alternative criteria may be accepted at the discretion of the admissions committee if there is good reason to believe the regular criteria do not adequately portray the students potential to do quality work in the program. However, admission to the program is highly competitive

and we seek to admit students with a general history of excellence;

- 3. Competitive Graduate Record Examination scores (GRE Math + Verbal greater than 1100). Students whose scores fall below this recommended minimum may present alternative criteria that indicate their capacity to do quality doctoral-level work. These alternative criteria will be considered and may be accepted at the discretion of the Clinical Admissions Committee; and
- 4. Demonstrated evidence of interest in clinical health research.

The program follows a mentorship model. Therefore, applicants whose research interests are similar to those of the faculty will be given higher consideration. Faculty interests and research are described on the Psychology Department Web site.

In addition, because clinical and health psychology are empirically-based disciplines, the program emphasizes continuous involvement in research and practice. For this reason, students primarily interested in psychotherapy and clinical or counseling practice without a strong interest in the scientific aspect of the scientist/practitioner model would be better served by other programs.

The program normally accepts 4-6 students each year. Applicants are evaluated based on the following dimensions: (1) academic potential; (2) research potential; (3) professional identity and involvement; and (4) interpersonal skills and other indications of potential for clinical work. The program follows the American Psychological Association Guidelines for Graduate School Offers and Acceptances.

Admission Procedure

Application materials may be downloaded from the Psychology Department Web site or requested directly from the Psychology Department (816) 235-**1318**.

Only applications postmarked on or before the January 15 deadline will be accepted. To apply, students shall submit the following materials:

A. Directly to the Psychology Department

Mailing Address

University of Missouri-Kansas City UMKC Clinical Psychology Program 5100 Rockhill Road Kansas City, MO 64110-2499

- 1. An up-to-date resume or vitae;
- 2. Documentation of previous health and/or clinical work or experiences (e.g., volunteer activities);
- 3. A detailed statement of career and professional goals, relating them to our curriculum and specific faculty interests;
- 4. At least three letters of recommendation;
- Evidence of research potential (e.g., prior research experience, documentation of presentations at professional meetings, reprints of published papers);
- 6. Clinical Psychology Supplemental Application available at the Psychology Department webpage and on request from the Psychology Department Office ((816) 235-**1318**); and
- 7. À copy of the UMKC general Application for Admission (available on the Psychology Department webpage or from the Department on request).

AND

B. Directly to the UMKC Office of Admissions

Mailing Address

University of Missouri-Kansas City Office of Admissions 120 AC 5100 Rockhill Road Kansas City, MO 64110-2499

- 1. UMKC general Application for Admission;
- 2. Official documentation of GRE scores; and
- 3. Application fee.

Plan of Study

The following represents the programs core curriculum.

First Year		
Fall Semester]	Hours
PSYCH 509	Assessment I	
PSYCH 516	Advanced Quantitative Analysis I	3 3 3
PSYCH 590	Directed Research	3
PSYCH 622	Theoretical & Ethical Issues in	2
Total Hours	Professional Psychology	3 12
Winter Semester	•	Hours
CPCE 530	Methods of Counseling	3
PSYCH 510	Assessment II: Clinical and	5
	Functional Assessment	3
PSYCH 517	Advanced Quantitative Analysis II	3 3 3 12
PSYCH 590	Directed Research	3
Total Hours		12
Summer Term	Hours	
	Optional Elective(s)	3-12
Second Year		
Fall Semester]	Hours
PSYCH 533	Psychopathology	3
PSYCH 590	Directed Research (Thesis)	3
PSYCH 601	Experimental Methods in	
DOMOLI (21	Design & Analysis I	3
PSYCH 631	Theoretical Foundations of	2
PSYCH 650	Health Psychology Clinical Practicum	3 3
Total Hours	Chinear Flacticulii	15
		T
Winter Semester PSYCH 538	Development & Evaluation of	Hours
151011556	Assessment Tools	3
PSYCH 590	Directed Research (Thesis)	3
PSYCH 625	Health Research Methods: Intro to	5
	Epidemiology & Clinical Trials	3
PSYCH 632	Health Psychology Interventions	3 3 3
PSYCH 650	Clinical Practicum	3
Total Hours		15
Summer Term	Hours	
	Optional Elective(s)	3-12
Third Year		
Fall Semester	Hours	
PSYCH 507	Cognitive Psychology	3
PSYCH 522	Contemporary Issues in	-
DOMOLI (50	Developmental Psychology	3
PSYCH 650	Clinical Practicum Pre-Dissertation	3 3 3
PSYCH 696 Total Hours	rie-Dissertation	12
Iotal mours		14

Winter Semester PSYCH 515 PSYCH 521 PSYCH 638 PSYCH 650 PSYCH 650	Advanced Systems & History of Psychology Advanced Social Psychology Seminar in Healthcare Leadership Clinical Practicum	3 3 3 3
PSYCH 696	Pre-Dissertation	3
Total Hours		15
Summer Term	Hours Optional Elective(s)	3-12
Comprehensive E	xaminations (End of Year Three)	
Fourth Year		

Fall Semester		Hours
PSYCH 518	Advanced Biopsychology	3
PSYCH 586	Theory, Research & Practice	
	of Consultation	3
PSYCH 650	Clinical Practicum	3 3 3
PSYCH 699	Research & Dissertation	
Total Hours		12
Winter Semester	Hours	
	Clinical Health Elective	3
	Psychology Elective	3 3 3 3
PSYCH 650	Clinical Practicum	3
PSYCH 699	Research & Dissertation	3
Total Hours		12
Summer Term	Hours	
	Optional Elective(s)	3-12
Fifth Year		
Fall Semester		Hours
PSYCH 660	Clinical Health Psychology Intern	. 1
Winter Semester	Hours	

PSYCH 660 Clinica	l Health Psychology Inte	rn.
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Requirements for Retention

A detailed description of the programs policies and procedures (including the requirements for retention) is available in the student handbook.

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Interdisciplinary Doctor of Philosophy: Non-Clinical Health Psychology

A complete description of the program, the admissions policies, and curriculum are provided on the Interdisciplinary Ph.D. web page

http://www.umkc.edu/catalog/sgs/hth-psyc.html and in the School of Graduate Studies section of this catalog.

Psychology Courses

504 Contemporary Issues in Learning (3). A discussion and analysis of recent research and theoretical papers in learning. Prerequisite: Psychology 304 or equivalent. The student will have to demonstrate under- graduate competence in learning in the first few weeks of this course in order to remain enrolled.

505 Motivation (3). The definition of the concept of motivation is explored. Emphasis is placed upon integration of the concept of motivation into comprehensive theoretical explanations of phenomena. Students should have in their background a foundation in Learning Theory (or at least Theory Construction) and Experimental (Scientific Method). Previous laboratory experiences are desired.

507 Cognitive Psychology (3). An overview of the cognitive approach to the study of human behavior. Recent research and theoretical issues in the areas of perception, memory, and concept formation are emphasized.

509 Assessment 1: Intellectual and Cognitive Assessment (3). This course is designed to provide students with a foundation in the use of intellectual and cognitive assessment instruments in clinical evaluation. The course covers theoretical issues pertinent to intellectual and cognitive assessment, as well as basic assessment skills including administration, scoring, interpretation, and

communication of results for commonly used measures. Prerequisites: Consent of instructor.

510 Assmnt mthd in Prof Counseling Course On Assmnt of Intellec Funct (3). This course provides an understanding of assessment process and assessment techniques. Skills and practice in selection, administration, and interpretation of representative assessment instruments. Two semester hours lecture, two semester hours lab experience per week. Cross-listed: CPCE 515.

511 Principles of Assessment in Psychology (3). This will be a field practicum course in which test batteries will be used to assess and evaluate the intelligence, personality, and aptitude of the individual. Prerequisite: Psych. 510 and consent of the instructor.

512 Contemporary Issues in Social Psychology (3). A critical survey of the recent literature in social psychology with emphasis on experimental investigations. Prerequisite: Psych. 312.

515 Advanced Systems and History of Psychology (3). In depth review of the major theoretical systems of psychology in terms of historical assumptions, methodologies and developments with the goal of enabling the student to better evaluate current theories and assumptions in psychology. Prerequisite: Psych. 415 or equivalent.

516 Quant Analysis 1: Regression And Analysis of Variance (3). This graduate level statistics course for students in education and the behavioral sciences provides a strong conceptual understanding of two major statistical procedures with the context of the general linear model: multiple regression and numerous analysis of variance (ANOVA) models. Students will learn to select appropriate statistical techniques, tests the assumptions of the techniques, analyze data using statistical software, and report the results of their analyses in the format of the American Psychological Association (APA, 2002). Prerequisites: An introductory inferential statistics course (EDRP505, PSY 316) and basic knowledge of research design (EDRP505, PSY302). Cross-listed: EDRP605. Offered: FAII.

517 Quantitative Analysis II: Advanced Topics in Regression and MDA (3). This graduate level statistics course for students in the behavioral sciences and education provides a strong conceptual understanding of advanced topics in regression (interaction effects, logistic regression, path analysis) and various multivariate techniques (MANOVA, canonical correlation, factor analysis). Students will complete a series of data based projects that allow them to demonstrate their skills in analysis, reporting and interpretation of findings. Prerequisites: EDRP 605/PSY 516 and basic knowledge of SPSS or SAS software and research design (EDRP505, PSY302). Cross-listed: EDRP 606. Offered: Winter.

518 Advanced Biopsychology (3). This course assumes that the student has mastered the basics of biopsychology, and deals with this topic in greater depth and scope than Psych 418. It will begin with a brief review and update of basic materials of neuroanatomy, neuronal conduction, and synaptic transmission but will quickly turn to an emphasis on biological influences on human psychology, in particular those biological factors that are of practical significance in the lives of patient and non-patient populations. Prerequisite: Psych 418 or equivalent.

521 Advanced Social Psychology (3). The study of the individual in a social context. How social structure and interaction influence the behavior of an individual. Several contemporary systematic positions will be compared. Prerequisite: Psych. 312.

522 Contemporary Issues in Developmental Psychology (3). A discussion of recent research literature in developmental psychology leading to an individual research project in this area. Prerequisite: Psych. 322.

523 Seminar Personality Theory and Methodology (3). A study of the social-cultural, trait, learning, perceptual, motivational, and field theories of personality with special emphasis on research studies and the methodology of personality research. Prerequisite: Psych. 323.

533 Psychopathology (3). A review of the experimental-clinical literature concerning the behavior disorders with special reference to their classification and etiology. Prerequisites: Consent of instructor required. Course generally will be restricted to students enrolled in license-eligible specialties who have had an undergraduate course in abnormal psychology.

538 Development and Evaluation of Assessment Tools (3). This survey course examines test theories, construction, and measurement theories. Within the context of a variety of conceptual frameworks and examples, students become knowledgeable about the various purposes, approaches, and computer software tools for measurement. Prerequisites: Psychology 516 and 517 Offered: Every Winter

540 The Psychology of Aging (3). This course will identify major issues concerning psychology related to aging. The major influences on the behavior, cognitive functioning and emotions of older adults will be examined. Consideration will be given to individual, group and environmental influences. Possible interventions will be identified. Cross-sectional and longitudinal

research will be reviewed in order to examine the changes in individuals due to aging and the differences between cohort groups. Three major areas of information will be the focus: concepts, theory and methods in psychology of aging; biological and social influences on behavior; and behavioral processes. There will be a review of current literature.

543 Adult Development and Aging (3). This course will identify major themes and issues of mid-life and older adults. It will examine major developmental theories of adult development and aging. A contextual approach is stressed, including research and theory on the impact of cohort, gender, race/ethnicity, socioeconomic status, and culture on development. Application to real life is integrated throughout the course. There will be a review of current literature.

550 Field Practicum (4). Provides supervised experience working in community agencies/ organizations which address various human and social problems. Students receive training in community service oriented skills and approaches, e.g., advocacy, community organizing, program assessment, development and evaluation, outreach, and applied research. Ten hours per week at practicum site and class attendance are required. Prerequisite: Consent of instructor. Offered: Fall and winter.

575 Professional Issues and Ethics in Psychology (3). Ethical and legal problems of research and practice will be discussed. Professional organizations in psychology and their publications will be reviewed.

575A Professional Issues & Ethics (3).

580 Special Topics (1-3). Offered by individual staff members as specialty course in his or her area. Prerequisite: Consent of instructor.

582 Community Mental Health (3). A review of current theory and research. The emphasis is on prevention rather than treatment of mental health problems. The assets and liabilities of neighborhood communities for mental health problems will be discussed. Recent methods in crisis intervention are reviewed. Each student will be required to become familiar with a neighborhood with a high incidence of application for mental health care.

586 Theory, Research and Practice of Consultation (3). Theory and research on community, mental health, organizational and agency consultation. Entry, process, outcome and ethical issues surrounding each model of intervention will be explored. Each student will be expected to conduct and report on a consultation project.

590 Directed Research (1-6).

597 Directed Readings in Psychology (3). Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty. Prerequisite: Consent of instructor. Offered: Every Semester

599 Research and Thesis (1-9).

601 Experimental Methods in Design and Analysis I (3). An examination of multifactor and multilevel designs and interactions. Topics covered will include randomized block designs. Latin square designs, complex trend analysis designs, covariance designs and multiple comparison of treatment means.

604 Field Practicum in Community Psychology (3). Supervised experience in health care, social welfare, correctional, political, ethnic, and neighborhood agencies. May be repeated six times for up to 18 credit hours. Each semester.

611 Theories & Methods of Assessment & Intervention/Community Psych (3). Review of the assessment and intervention literature in social situations will be conducted. Students will design and carry out an assessment and an intervention project.

612 Program Evaluation and Research Dissemination (3). A study of the area of applied research in which process and outcome characteristics of programs are related explicitly to a set of values, such as program goals, objectives and costs.

614 Prevention Science I: Theories, Principles and Methods (3). Course provides a comprehensive overview of the field of prevention emphasizing basic concepts, conceptual models, and approaches associated with prevention in the field of psychology. The goal is to provide knowledge that will allow students to critically evaluate prevention programs in their communities. Students apply their learning by conducting a critical analysis of an existing community prevention and/or health promotion initiative. Prerequisite: none Offered: Every winter

615 Prevention Science II: Applications (3). This advanced seminar is the follow-up course to Prevention Science I. Emphasis is placed on the application of prevention science to specific content areas (e. g., substance abuse, violence in schools physical or sexual abuse, AIDS/HIV infection, infant mortality, cardiovascular disease, promoting social competence.) A semester project involves an in-depth review of prevention efforts in the chosen area of interest, resulting in a comprehensive research proposal and/or public policy analysis. Prerequisite: Psych 614 (Prevention Science I) Offered: Even years, fall semester, beginning 2000

622 Theoretical and Ethical Issues in Professional Psychology (3). This course is designed to introduce first year doctoral students to the fundamental concepts and methods of psychology conceived as the application of scientific and ethical reasoning to human problems. It will provide an in-depth examination of the American Psychological Association code of ethics and its application to the conduct of psychologists. Critical and analytical thinking will be emphasized in all aspects of the course. The course will cover broad models of clinical and counseling psychology and their historical and scientific foundations, issues in diagnosis, cross-cultural applications and professional problems in light of ethical principles, professional standards, scientific data & multi-cultural contexts. Prerequisite: consent of the instructor. Offered: Fall.

623 Methods of Counseling in Professional Psychology (3). This course is designed to introduce students to the fundamental concepts and methods of counseling in professional psychology. Students will apply ethical and multicultural principles to the helping relationship while learning the basic methods of humanistic, psychodynamic, and cognitive behavioral approaches as they related to the helping process. A main focus of this course is the acquisition of basic helping skills. Students will also become familiar with counseling outcome research and will increase their level of counselor self-awareness. Prerequisite: PSY 622. Cross-listed: CPCE 530 Offered: Winter.

625 Health Research Methods: Intro to Epidemiology & Clinical Trials (3). This course will introduce graduate students in health-related disciplines to research methods utilized in understanding disease and health risk in humans and conducting intervention trials. Students will learn about how edidemiology contributes to: 1) identifying factors that cause diseases; 2) assessing the public health importance of diseases; 3) describing the natural history of diseases; and 4) evaluating procedures for preventing or treating diseases. After completing this course, students should be able to read and summarize epidemiological research papers and answer questions about a study's purpose, design, methods of procedure, results, and major strengths and weaknesses. Prerequisites: Admission to graduate standing; PSY 601, or equivalent. Offered: Every Winter

631 Theoretical Foundations of Health Psychology (3). This course will introduce students to the theoretical foundations of health psychology, including the Biopsychosocial model, individual and systems level theories of behavior change, stress and coping, disease prevention and health promotion, as well as adherence and relapse models. Upon completion of this course students will possess a broad understanding of how cognitive, behavioral, and social factors interact with biological parameters in influencing morbidity and mortality. In addition, students will become familiar with several substantive areas (e.g., chronic pain, HIV/AIDS, cancer, sleep disorders, cardiovascular risk reduction), research methods, and multicultural and ethical issues in health psychology.

632 Health Psychology Interventions (3). This course will introduce students to a wide range of psychological assessment and intervention strategies that can be used in health care settings. Individual, group, community and policy interventions will be discussed. This course may be used for credit in the Health Psychology Discipline of the Interdisciplinary Ph.D. Program. Prerequisite: Psyh 631 and consent of instructor. Offered: Every Winter

638 Seminar in Health Care Leadership (3). This course is designed to offer an educational experience that fosters both the knowledge and skills needed for leaders of healthcare in the future. The instructors will guide students through the process of generating new thinking, creating new knowledge, and enhancing interpersonal and professional effectiveness. Course topics will include what creates health and quality of life, social capital and health, healthcare policy, collaborative problem-solving, and transformational leadership and systems thinking.

650 Clinical Practicum (3). Advanced supervised assessment and psychotherapy with individuals and groups in applied settings. Preregistration by application to instructor at least 60 days prior to the beginning of the semester. Approval by the Interdisciplinary Health Psychology Program Director required. Prerequisite: Psyh 623 Professional and Ethical Issues in Practice II.

660 Clinical Health Psychology Internship (1-6). Planned sequence of training experiences in an organized program designed to prepare students for the practice of professional psychology. Prerequisite: Consent of instructor

696 Pre-Dissertation (1-12). Individualized research experiences to prepare students for the conduct of the dissertation. Pre-requisite: consent of instructor. Offered: continuous Every semester.

699 Research and Dissertation (1-16).

899 Required Graduate Enrollment (1).

Religious Studies

204E Haag Hall 5120 Rockhill Road (816) 235-**5704** or **5854** Fax: (816) 235-**5542** rel-st@umkc.edu http://www.umkc.edu/rel-st

Mailing Address

University of Missouri-Kansas City Center for Religious Studies 5100 Rockhill Road Kansas City, MO 64110-2499

Program Director: Professor Gary L. Ebersole

Description of Program

The Center for Religious Studies offers an interdisciplinary, cross-cultural and socio-historical approach to the study of religion. The Center is a consortium of several area institutions of higher education that have pooled their resources to participate in the UMKC Interdisciplinary Ph.D. program. Students in religious studies are introduced to the many dimensions of religious belief, practice and expression found in human cultures across time and space. In addition to graduate courses, the Center offers a number of undergraduate courses. Related courses relevant to the study of religion will be found under the listings of other departments and programs.

Doctoral Program

See the School of Graduate Studies section of this catalog.

Religious Studies Courses

500 Special Topics in Religious Studies (1-3). Special topics in religious studies. The focus of the course will vary by semester and instructor.

510 Religions of the World (3). This course is designed to introduce graduate students to the major religions of the world, as well as to selected small-group religions. Our goal will be to learn to appreciate the similarities and differences in the structure and history of these religions. A primary focus will be on using the categories of the history of religions to examine and analyze the various dimensions of religion (e.g., historical, sociological, ritual, mythological, aesthetic). In addition, methodological issues of comparison will be addressed.

584RS Sacred Narratives and Texts (3). This course will study the "social lives" of sacred narratives and texts as they circulate within religious communities. Among the topics to be studied are methods of exegesis in different religious traditions, orality and literacy (including the reoralization of written texts), the canonization process, the emergence of interpretive specialists, text as amulets, reading and meditative practices and techniques, and narratives and the arts. The course is comparative, cross-cultural, and interdisciplinary in nature.

586RS Methodological Approaches to the Study of Religion (3). This course examines the various disciplines that undertook the critical, objective study of religion beginning in the second half of the nineteenth century and continuing into the present. The course examines how the disciplines of the social sciences and humanities emerged in the last century and how the study of religion emerged from its roots in Jewish scholarship and Christian theology to be included under the umbrella of the humanities and social sciences. The historical development of religious studies as a historical and intellectual contexts.

587RS Research Seminar (3). Students in this course will produce a major research paper under the direction of the instructor: a self-contained thesis chapter, an article for publication or the equivalent.

594RS Death in the History of Religion (3). As a biological "fact," death would appear to be a human universal. Yet, human beings have imagined–and, thus experienced–the meaning of death in many diverse ways in different cultures and over time. This course explores the conceptualization and representation of death and dying, as well as the ritual activities surrounding death, found in selected religious communities. The goal is to gain insight into how people have sought to (re) create a world of meaning in the face of death and to gain a critical perspective on our own contemporary situation.

595RS Time and Space in the History of Religions (3). Time and space are essential components of the lived worlds of human beings, yet the cultural and

historical constructions of these are remarkably diverse and, moreover, are subject to change. This course is a cross-cultural, interdisciplinary, and comparative exploration of the constructions and experiences of time and space found in selected religious communities and historical periods. In addition, it investigates the pivotal role the categories of "sacred and profane time and space" have played in theorizing religion and in the study of religious myths and rituals in the modern period. Time and space are essential components of the lived worlds of human beings, yet the cultural and historical constructions of these are remarkably diverse and, moreover, are subject to change. This course is a cross-cultural, interdisciplinary, and comparative exploration of the constructions and experiences of time and space "in ave sploration of the communities and historical periods. In addition, it investigates the pivotal role the categories of "sacred and profane time and space" have played in theorizing religion and in the study of religious myths and rituals in the modern period.

596RS Body in the History of Religion (3). The human body is the site of extensive imaginal and ritual activities in all religious traditions. This course explores some of the diverse ways religious communities have imagined and experienced the human body, as well as how the body had been manipulated and worked on in an effort to transform the human situation in the world.

597RS Non-Thesis Research/Reading (1-6). Individual direction of student reading or research by selected, consenting faculty. This course can be taken only when faculty supervision is unavailable in colloquia or seminars.

598RS Seminar in the History of Religions (3). Advanced graduate seminar on a selected topic or problem in the History of Religion. Topic varies, but the seminar will have a methodical or theoretical focus. May be repeated for credit when topic is different.

680RS Doctoral Colloquium (3). This course will examine the writings and theories of major scholars in a particular area of Religious Studies. The authors, works and intellectual currents which form the basis of the colloquium will vary from semester to semester depending upon the professor's expertise and design for the course.

687RS Doctoral Research Seminar (3). Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

697RS Doctoral-level Independent Readings (1-6). Individual reading under the supervision of members of the Religious Studies Doctoral faculty and adjuncts in preparation for the Comprehensive Examination for the Ph.D.

699RS Dissertation (1-15). Course credits in dissertation.

899 Required Graduate Enrollment (1).

School of Social Work

Master of Social Work Program 4825 Troost Avenue, Suite 106 (816) 235-**1025** Fax: (816) 235-**6573** soc-wk@umkc.edu http://www.umkc.edu/soc-wk

Mailing Address

University of Missouri-Kansas City School of Social Work 5100 Rockhill Road Kansas City, MO 64110-2499

Program Director/Chair/Professor: Kathylene Siska (policy and research) Field Practicum Director:

Maurice Macey

Faculty:

Rosalyn Bertram (children, youth & families; developmental disabilities), Walter Boulden (research), J. Larry Dyer (practice and substance abuse), Walter Kisthardt (mental health), Lee Rathbone-McCuan (social policy and aging), Elaine Spencer-Carver (practice, violence across the life span; children, youth, families, qualitative research)

Department Description

The School of Social Work offers a program of study leading to the master's in social work degree and a professional career in social work. Started in 1999, the M.S.W. program is the result of collaborative efforts by the University of Missouri System, UMKC and many social service agencies in the Kansas City metropolitan area. The M.S.W. program received initial accreditation in May, 2003.

The mission of the UMKC M.S.W. program is the preparation of competent professionals for advanced generalist social work practice in the urban environment. The M.S.W. program emphasizes three themes across the curriculum: empowerment and social and economic justice; strengths perspective and asset building; and community building.

Achieving proficiency in each of these competency areas results in an M.S.W. graduate with the ability to practice across a variety of social service settings and with a specialty set of skills individualized through the selection of elective courses.

Career Implications

Why consider an advanced degree in social work? Above all, the degree is flexible and versatile. For example, social workers are employed in public social service agencies, nonprofit organizations, medical settings, schools, community-based clinics and residential settings. The social work perspective looks not only at individual thoughts, feelings and actions, but also at the social environment as a primary arena for opportunities for change. On behalf of the people they serve, social workers have strong interests in social policy and advocacy, as well as social science research and policy and program evaluation.

Program Description

The program educates advanced generalist social work practitioners for professional responsibilities in today's challenging human service field. To accommodate working students' schedules, many classes are scheduled for late afternoons, evenings and weekends.

As adult learners, students have opportunities to choose assignments and electives fitting their learning needs. Faculty members view students as active co-directors of the learning process. Group discussion and debate; role playing; and other experiential activities complement readings and written assignments.

The practice-oriented curriculum is focused on advanced generalist social work practice in an urban environment. It is an eclectic theory base for viewing human behavior in the social environment; skills for operating in a multidisciplinary agency and community environment; research methods with practical application to agency practice; and approaches to working with culturally diverse populations.

The full-time, regular M.S.W. program offers a two-year, 60-credit curriculum combining classroom and field experience. For students who already have a B.S.W. degree, the full-time advanced standing program includes 36 credits during a summer semester and one full-time year of coursework with a supervised field practicum. Any student may attend part-time but must complete the M.S.W. in four years.

The foundation year includes coursework in generalist social work practice theory and skills, social policy, human behavior in the social environment, social work research and a generalist field practicum experience in a social service agency 16 hours a week.

In the concentration level year, the curriculum focuses on advanced generalist method within an urban context. Students select four electives with a requirement of at least one elective in Integrative content area and at least one elective in Advanced Methodological approaches to Social Work practice. Students explore individualized interest by their selection of electives. Then a second field practicum for 16 hours a week provides advanced generalist experience and supervision.

Field Practicum

The practicum program uses agencies throughout the metropolitan area to offer experiences at both foundation and advanced levels. Students typically spend two days in the field and are mentored by an M.S.W. practitioner employed by the agency. Students spend a required number of hours in face-to-face contact with clients; in agency meetings; in individual or group supervision; and in the community. In some cases, students who already are social service employees can arrange to complete one year of their field placements at their own agencies.

Admissions

The majority of applicants to M.S.W. programs have a variety of undergraduate degrees. Some people have life or work experience in other fields and are ready for a career change. Others have worked in the human service field and are ready to pursue an M.S.W. degree to advance in their careers.

Applicants who already have a B.S.W. degree can consider the advanced standing program if they have received the B.S.W. degree within the last five years and had a 3.0 grade-point average in the B.S.W. major.

For both the regular and advanced standing programs, applicants should request an admissions packet from the school. The packet contains an information folder, a program application, and a graduate student application from the University.

In addition to standard materials, applicants must submit an essay in response to the questions: (1) "What social need do you hope to address as a professional social worker?" and (2) "What groups of people or what organizational settings might best utilize your personal and professional talents?" Three confidential references from people able to assess the applicant's work and academic experience and professional potential are required. Students must send this material directly to the program. While personal interviews are not required, the M.S.W. Admissions Committee may request a meeting with an applicant. Applicants with questions about the program may attend public information sessions, which are scheduled once a month on campus or at a local agency.

The program is inclusive and draws from a diverse applicant pool. Toward this end, program faculty members make regular community presentations to diverse groups, and work with the Office of Student Affairs to link with student organizations representing women; people of color; gays and lesbians; international students; and students with disabilities. Complete admission requirements include:

- An application submitted as instructed;
- A bachelor's degree from an accredited college or university. The applicant's undergraduate education must reflect a sound liberal arts foundation, including courses in the humanities, as well as in the social and behavioral sciences;
- An undergraduate grade-point average of 3.0 or better for the last 60 hours of coursework;
- In some cases, students may be admitted on a provisional basis if they have less than 3.0 GPA, meet all other admissions requirements, and have submitted a written statement asking to be considered for admission based on: (1) completion of 6 hours of relevant graduate-level coursework, acceptable to the faculty, with a grade-point average of 3.0, reported on an official transcript or (2) evidence of sustained commitment and significant contribution in the field of human services;
- The program does not give academic credit for life experience or previous work experience;
- Student transfers from other accredited M.S.W. programs may apply to the program. Some or all of a student's completed coursework will be considered for transferred credit; and
- All applicants transferring from other M.S.W. programs in which they are currently enrolled must be in good standing with the program.

Degree Requirements

The graduate social work program grants the M.S.W. degree when students have completed the following degree requirements:

- 1. 60 credit hours of class (48 hours) and field (12 hours) for regular program students;
- 2. 36 credit hours of class (30 hours) and field (6 hours) for advanced standing students;
- 3. To remain in good standing, students must maintain a cumulative GPA of 3.0;
- 4. Part-time students must demonstrate acceptable progress towards the degree;
- Students take four electives in the concentration year, with one elective from Integrative Content electives (Aging, Mental Health and Substance Abuse, Children, Youth and Families or School Social Work) and one elective from Advanced Methods electives required;
- 6. Testing out of foundation courses, except for practice courses and field practicum, is an option. Students are given the opportunity to waive up to 6 credit hours by taking the equivalent of a final examination for a course, offered at the beginning of the semester. These credits must be replaced by electives.

Note: For students with disabilities or special learning needs, the program works closely with the Office of Disabled Student Services regarding special accommodations.

Student Advising

M.S.W. students can seek information and support from the faculty. After admission to the program, students attend an orientation, receive a Student Handbook, and are assigned an academic adviser from the faculty. Ongoing contact with the adviser ensures that a plan of study is meeting the expectations of the student and the guidelines of the M.S.W. program. Part-time students will find the adviser particularly helpful in planning the sequence and the timing of courses and field work. When a student selects a field placement, the field practicum director and a faculty field liaison work with the student and the agency to ensure a quality learning experience. In addition, the M.S.W. program director and the M.S.W. student organization offer opportunities for students to discuss their experience in the program and in the field.

Plan of Study

The following course of study is a typical schedule for a full-time student. A student must complete all foundation level courses before taking any concentration level courses. The plan of study is subject to change.

Regular Program

0	
Fall	
SW510	Foundation Field Practicum I (3)
SW530	Human Behavior: Individuals in the Social
	Environment (3)
SW532	Foundations of Social Work Practice I (3)
SW534	Social Welfare Programs and Policies (3)
SW536	Social Work Research Methods (3)
Winter	
SW511	Foundation Field Practicum II (3)
SW531	Human Behavior: Families, Groups,
	Organizations, and Communities (3)
SW533	Foundations of Social Work Practice II (3)
SW535	Social Welfare Policy Practice (3)
SW537	Statistical Applications in Social Work Research (3)
	Research (5)
Fall	
SW512	Advanced Field Practicum I (3)
SW540	Advanced Social Work Practice I (3)
SW550	Social Work Practice and Program
VVV	Evaluation I (3)
XXX XXX	Advanced Methods Elective (3)
ΛΛΛ	Integrative Content Elective (3)
Winter	
SW513	Advanced Field Practicum II (3)
SW541	Advanced Social Work Practice II (3)
SW579	Capstone Seminar in Social Work (3)
XXX	Advanced Methods Elective (3)
XXX	Integrative Content Elective (3)

Advanced Standing Program

Advanced standing students must enroll in the following required summer courses; unless SW531, SW535 and SW537 are completed prior to summer matriculation.

SW538	Advanced Standing Seminar: Contemporary
	Trends in Social Work Practice (3)
SW539	Advanced Standing Seminar: Emerging Issues
	in Social Welfare Policy and Research (3)

Advanced standing students then complete a comparable advanced-level year curriculum with other program students.

Professional Status

After graduation, students are well prepared to accept a professional social work position with populations at-risk in a variety of social service, mental health, medical, or community settings.

Both Missouri and Kansas offer an exam to license specialist clinical social workers after two years of supervised practice in direct services. For social workers who plan to practice at this level, Kansas statutes require completion of graduate or continuing education courses in psychopathology and diagnostic skills. Students who are considering clinical licensure in Kansas are encouraged to take this course as an elective prior to graduation from the M.S.W. program.

Social Work Courses

510 Foundation Field Practicum I (3). Students spend 16-hours weekly in a generalist field practicum setting under MSW supervision Participation in a 12-hour integrated field seminar on campus led by faculty is required. Must take one human behavior course (SW530 or SW531) prior to entering or concurrently with field placement. Must take SW 532 concurrently.

511 Foundation Field Practicum II (3). Students continue the field practicum experience from SW 510 and participation in the integrated seminar on campus. Focus on generalist knowledge, values, and skills. Prerequisite: Completion of SW 510 and SW 532. Must take SW 533 concurrently.

512 Advanced Field Practicum I (3). Students are placed in a field setting in their chosen field-of-practice concentration approximately 16 hours per week under the supervision of an MSW field instructor. SW 540 must be taken concurrently. One concentration seminar must be taken prior to or concurrently with entering this field placement.

513 Advanced Field Practicum II (3). Students complete a final semester in their field-of-practice concentration agency setting approximately 16 hours weekly under MSW supervision. SW 541 must be taken concurrently.

530 Human Behavior: Individuals in the Social Environment (3). This theory course focuses on the interactional context of human behavior essential to all social work practice. A variety of perspectives are considered in the understanding of the individual; developmental, ecosystemic, biopsychosocial, traditional, and alternative. Diversity and resiliency are the are key course concepts.

531 Human Behavior: Families, Groups, Organizations, and Communities (3). This theory course applies social work's ecosystemic framework to the understanding of human behavior in families, groups, organizations, and communities. Knowledge and applied theories and paradigms are examined that honor social justice, human diversity, strenghts/assets, and community-building to enhance effective social work practice. Prerequisite: SW 530

532 Foundations of Social Work Practice I (3). This course examines the fundamental knowledge, values, and skills of generalist social work practice with a focus on person-in-environment. Course topics include values and ethics, collaborative approaches to helping, stages of the helping process, and beginning practice skills with at-risk populations. Concurrent enrollment in SW510 is required.

533 Foundations of Social Work Practice II (3). This second generalist social work practice course examines effective helping approaches with diverse families, small groups, and communities of identify and/or place. The course also introduces values and working styles for professional practice in organizations. Pre-requisite: SW532 and SW 510. Concurrent enrollment in SW511 is required.

534 Social Welfare Programs and Policies (3). This course examines social policies that direct current social service trends at local, state, and federal levels. Students learn a model of analysis that examines the context in which policy decisions are made and the effects that social service programs and policies have on people's lives.

535 Social Welfare Policy Practice (3). This course prepares students with a social justice/empowerment orientation and the knowledge, skills and values needed to become an effective policy advocate, particularly with people who experience the effects of poverty, discrimination, exclusion, and oppression. Pre-requisite: SW 534

536 Social Work Research Methods (3). This course introduces students to the fundamental knowledge and skills of social work research such as practice evaluation, program planning, and other facets of professional social work practice. Emphasis on application of social research methods in actual practice situations will be used to assist students in skill development.

537 Quantitative Social Work Research Methods (3). This course is designed to prepare graduate level students to develop a comprehensive understandig of statistical method application to social work research. Students will gain a basic understanding of the research and statistical procedure that are needed for clinicians/researcher to operate within the field today. Students will become proficient in reading analyzing and assessing the results of social work publications. Prerequisite: SW 536 Social Work Research Method

538 Advanced Standing Seminar: Contemp Trends in Social Work Practice (3). This required seminar is designed for BSW'S entering the Advanced Standing Program and serves to update and integrate social work practice approaches with contemporary perspectives of human behavior in the social environment. Restriction: Restricted to Advanced Standing Students.

539 Adv Standing Sem: Emerging Iss in Soc Welfare Policy and Research (3). This required seminar in the Advanced Standing Program examines emerging policy issues and research developments in the field. Students prepare to choose a field-of-practice concentration and to enter the Advanced-level year of study. Restriction: Restricted to Advanced Standing Students.

540 Advanced Social Work Practice I (3). This course prepares students with an advanced generalist social work perspective and to evaluate and integrate theory, values, and skills for assessment and direct practice with complex case situations in a rapidly changing service environment. Must Be taken concurrently with SW 512. Prerequisite: Completion of foundation year.

541 Advanced Social Work Practice II (3). This course extends the advanced generalist model of social work practice to working with challenging families and small groups. The course introduces leadership, organizational, and management competencies for professional practice in social service agencies and skills for coalition-building and collaboration in communities. Must be taken concurrently with SW513. Prerequisite: Completion of foundation year.

542 Social Services with Older Adults (3). This course provides an overview of social service practice with older adults. Students examine population demographics, identify normal and abnormal aspects of aging, and examine methods, paradigms, and approaches to effective advanced generalist practice in treatment and community settings. Prerequisite: Completion of foundation year.

543 Social Service Programs and Policy in Aging (3). This course provides an overview of the primary service delivery programs available to older adults and the major social policy that impacts that delivery system. Best practice examples from around the country are explored as students examine current and developing models of care. The course also examines advocacy approaches to improving social policies and treatment of older adults. Prerequisite: SW 542 and completion of foundation year.

544 Social Work Practice with Children, Youth, and Families (3). This course examines models of assessment and treatment with at-risk children, youth, and their families across a variety of settings, including child welfare, mental health, school and neighborhood-based agencies, early intervention programs, and residential treatment. Prerequisite: Completion of foundation year.

545 Social Programs and Policies for Children Youth, and Families (3). This course focuses on policy issues and the service delivery system which serves at-risk children, youth and their families across a variety of settings. The course reviews how policy decisions (1) impact family life, particularly of oppressed and excluded groups and (2) influence social work practice approaches with children, youth and families. Prerequisite: SW 544 and completion of foundation year.

546 Mental Health and Mental Illness Seminar In Social Work (3). This course examines current practice approaches and policy/research issues in mental health and mental illness. Students focus on service delivery systems of mental health care with a variety of adult populations from a consumer empowerment perspective. Prerequisite: Completion of foundation year.

548 Alcohol and Substance Abuse Seminar in Social Work (3). This course examines current research and methods, models, and theories to address alcoholism/addiction in prevention and education, direct practice, and policy arenas. Prerequisite: SW546 and completion of foundation year.

550 Social Work Practice and Program Evaluation I (3). This course is designed to train students in evaluation of direct practice, program evaluation, and other research activities at organizational and community levels using advanced methods of qualitative and quantitative research. Prerequisite: Completion of foundation year.

560 Psychopathology: A Competency Based Assessment Model Adv Gen SW (3). The DSM will be used in conjunction with a competency-based assessment model that includes an ecological approach and systems theory to determine what biopsychosocial factors have contributed to the client's problem. The multi-axial system become a tool to gather information, that supports the competency-based assessment. Prerequisites: Foundation Coursework Offered: Every Fall

562 Family Therapy in Advanced Generalist Practice (3). This course provides an overview of contemporary perspectives and models of family-centered social work practices and examines their basic assumptions, assessment processes, practice principles and interventive strategies. This course will also extend knowledge of the particular issues facing low socioeconomic families, ethnic and racial minorities, women, older couples and intergenerational families. Prerequisites: Foundation Coursework

564 Advanced Group Therapy For Social Work Practice (3). This course provides both a didactic and experiential introduction to advanced group therapy for social work practice, explores the therapeutic factors, norms and their creation, the role of leader and termination as a group experience. Offered: On Demand

568 School Social Work Practice (3). Students will learn the knowledge and skills required for performing roles and functions of school social work in K-12 settings. They will apply social systems and the strengths perspectives within the context of school as organizations interconnected to community environments. Offered: On Demand

575 Advanced Generalist Community Practice (3). This seminar covers community social work practice at the advanced level addressing values, knowledge and skills essential for community social change. Models of community practice are addressed to facilitate student skill applicant in social planning, community development, and community collaboration strategies. Each model requires knowledge of large systems practice. Prerequistes: Completion of 30 crs or Required Foundation Curriculum Offered: Every Winter on Demand

579 Integration Seminar in Social Work (3). This course, taken in the last semester, serves as a final integration of advanced generalist competencies in an urban environment. Students prepare a major project for presentation in a public forum.

580 Special Topics in Social Work (1-3). These seminars are designed to examine relevant and innovative areas emerging in social work practice which are not available in the regular course offerings. Topics, instructors, and prerequisites are listed in the semester bulletin. Prerequisite: Completion of foundation year.

590 Readings and Investigations in Social Work (1-3). Under the direction of a faculty member, individual students may pursue an in-depth area of study in generalist social work practice, including a research project of the student's choice. Prerequisite: Permission of Director and Curriculum Committee.

Department of Sociology/Criminal Justice and Criminology

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Mailing Address

University of Missouri-Kansas City Department of Sociology/Criminal Justice and Criminology HH 208 5100 Rockhill Road Kansas City, MO 64110-2499

Department Chair:

Linda Breytspraak

Professors Emeriti:

Oscar Eggers, Henry G. Burger, Thomas Carroll, C. Neil Bull

Professors:

Wayne Lucas (principal graduate adviser, criminal justice and criminology), Philip G. Olson (director of urban affairs program), Peter Singelmann

Associate Professors:

Leanne Fiftal Alarid (coordinator, criminal justice and criminology), James Anderson, Linda M. Breytspraak (director of Center on Aging Studies, director of graduate program in gerontology), Cathleen Burnett (principal undergraduate adviser), Burton Halpert, David W. Moller, Deborah Smith (director of family studies)

Assistant Professors:

Dana M. Collins, Douglas Cowan (principal graduate adviser, sociology), Alexander Holsinger, Kristi Holsinger, Shannon Jackson (coordinator, anthropology program), Kenneth Novak, Tanya Price

Visiting Assistant Professor:

Barbara Bonnekessen (anthropology)

Lecturer:

Julie Russell (sociology)

Joint Appointment:

Greg Arling (Henry W. Bloch School of Business and Public Administration), Louise Arnold (School of Medicine)

Administrative Assistant: Tricia Falk

Department Description

The Department of Sociology/Criminal Justice and Criminology offers programs of study leading to the bachelor of arts in sociology; the bachelor of arts in criminal justice and criminology; the master of arts in sociology; and the master of science in criminal justice and criminology. The undergraduate major in sociology may choose an emphasis area from the several options offered. Additionally, program minors are available in sociology; criminal justice and criminology; anthropology; family studies; women's studies; and gerontology. Sociology also is a participating discipline in UMKC's Interdisciplinary Ph.D. program. (See the School of Graduate Studies section of this catalog for more information.)

The mission of the department is to extend knowledge about the nature of social life. This mission includes continuing participation by faculty in significant criminological and sociological research; other scholarly endeavors; and inviting students to join in that activity by:

- Learning the core materials of the discipline;
- Acquiring research skills;
- Assisting in faculty research;
- Becoming involved in student activities that supplement coursework and research.

Career Implications

The undergraduate degrees in sociology and criminal justice and criminology provide a general education and preparation for entry into a variety of professional schools. Students who major in these fields are particularly prepared for graduate education in not only sociology and criminal justice and criminology but also anthropology, psychology, urban studies, public administration and other fields.

Sociology and criminal justice and criminology offer preparation for any occupation in which a broad understanding of social life is valuable, or in which social research skills are used.

Undergraduate programs are designed to meet the requirements of both those who may decide on careers in sociology and criminal justice and criminology, and those who find in these areas a subject matter around which to organize their general liberal arts education. Undergraduate courses are also of special merit to students majoring in other fields, providing insight into the social and policy implications and consequences of many forms of social, economic, business and technological change.

Undergraduate majors pursue graduate training in sociology or criminal justice and criminology in preparation for academic and practice careers. A master's degree or doctorate is essential for teaching, advanced research or applied careers. Others choose graduate work in other fields: social work, education, public health, business administration, urban planning, law and medicine.

To the fullest extent possible, programs of study will be formulated to suit the student's academic goals. It is recognized that those goals may change during the several years of academic work.

Department Activities

Academic Advising

Student academic advising is a continuous process in the department. The principal undergraduate and graduate advisers are available for consultation throughout the academic year. The department recommends that students check the program requirements in the department office before filing the declaration of major form. Undergraduate majors are encouraged, and graduate students are required, to consult with the department to establish a tentative plan of study. Students should leave their mailing addresses with the department so that they can receive mailings and modifications of the class timetable.

Special Opportunities in Gerontology

The department offers individualized study in gerontology at the undergraduate level in consultation with members of the Center on Aging Studies staff. The department also offers several courses for graduate students in interdisciplinary study with an interest in gerontology. These courses may be taken either by degree-seeking students as a part of their programs or by non-degree-seeking students as a continuing education program. Students who are interested in gerontology may develop a plan in conjunction with graduate degrees in sociology, psychology, adult education, music education, nursing and public administration. The Center on Aging Studies offers a concentration in aging through its 18 credit hour graduate gerontology certificate program. Those who are interested should contact the Center on Aging Studies at (816) 235-**1747**, or Eliza Kendall, coordinator of the Gerontology Certificate Program, at (816) 235-**2186**.

Center on Aging Studies

5215 Rockhill Road (816) 235-**1747** http://www.umkc.edu/cas

The Center on Aging Studies, which is part of the College of Arts and Sciences, is an interdisciplinary unit concerned with education, research, resource development and community activities designed to understand and improve living conditions of the older population. Among the areas of research and training are health care systems and health promotion, caregiving, grandparents raising grandchildren, volunteerism, intergenerational relationships, social security, social identity and self development, and aging in other cultures. The center seeks to bridge the gap between knowledge and its application in the development of services and policies.

The center, in conjunction with the College of Arts and Sciences Continuing Education Division, administers graduate and undergraduate certificate programs in gerontology, fosters new course development and provides continuing education opportunities for the community and the region.

The Center on Aging Studies has built on its position in the heartland of America with emphasis on issues of aging in rural areas. The center works closely with University of Missouri Outreach and Extension throughout the state.

Cooperative Programs

The department cooperates with several other programs on the campus by jointly listing courses at the undergraduate level:

- American studies
- Anthropology
- Black studies
- Criminal justice and criminology
- Family studies
- Honors program
- Urban affairs
- Women's studies

Sociology Honor Society and Criminal Justice/Criminology Club

The department has a chapter of Alpha Kappa Delta, a national honorary society for sociology. The society sponsors a sociology club and a variety of extracurricular activities for student sociologists.

Special Award

A special award was established as a memorial to Edward Tomich, Ph.D., professor of sociology from 1964 to 1976. On the recommendation of the department faculty, the Edward Tomich Award is given annually to a senior student majoring in sociology or criminal justice and criminology who exemplifies an indomitable spirit; a commitment to the struggle for human welfare; an unquenchable thirst for knowledge and personal growth; an unwillingness to be cowed by authority or the superficialities of status; a readiness to ask the more difficult questions while being ready to accept the uncertainty of answers; and an appreciation of the value of theoretical knowledge about human interaction in everyday life.

Financial Assistance

Students can receive financial assistance through various campus scholarships, loan programs, grants and the work-study program. Students who are interested should contact the Financial Aid and Scholarships Office. In addition, a small number of graduate students may receive financial assistance through teaching and research assistantships offered by the department. These assistantships offer an important opportunity for students to develop their professional skills through teaching or research.

Master of Arts: Sociology

Admission Requirements

Regular admission to graduate study typically requires a baccalaureate degree in sociology from an accredited college or university with an undergraduate GPA of 3.0 (B) in the last two years (junior and senior) of coursework, and in sociology coursework. Students should have taken undergraduate courses in social theory, research methods, and statistics (equivalent to SOC 361, 362 and 363), and have passed each of these courses with a B or higher. Students who do not meet these requirements may be accepted provisionally to the program. Provisional admission means deficiencies must be remedied before being fully admitted as a degree-seeking student in the master of arts in sociology program.

Application Procedures

Applicants for the winter semester submit all materials by November 1, and those applying for fall semester admission must have materials submitted by April 1, or March 1 to be considered for graduate teaching or research assistantships. For an application to be processed, the following information must be submitted:

- An application for admission to UMKC;
- All undergraduate transcripts;
- Three letters of recommendation, preferably from former instructors;
- A statement of one to three pages concerning your goals for graduate study, the nature of your interest in sociology, any past experiences relevant to this choice, and your future plans.

The application for admission and transcripts should be submitted to the university's Office of Admissions. The statement and letters of recommendation should be sent to the principal graduate adviser for sociology at the department address.

In addition, we strongly encourage a personal interview with the principal graduate adviser or other appropriate department faculty.

Career Implications of the M.A. in Sociology

Some M.A. recipients go directly into teaching at the community college or high school level. Others enter the corporate, nonprofit, and government worlds in areas such as directors of research, policy analysis, consulting, human resource management, and program management. Some may become a director in a social service agency. For outstanding students, the M.A. is preparation for doctoral level studies.

M.A. Degree Requirements

All graduate students are required to take the following courses which should be taken early in the program:

		Hours
SOC 501	Social Theory I	3
SOC 502	Social Theory II	3
SOC 510	Sociological Research Methods I	3
SOC 511	Sociological Research Methods II	3
SOC 516	Intermediate Statistics	3

Other degree requirements include:

1. Students may choose the remainder of their coursework from the electives at the 500 level offered in the department and from graduate courses offered in other departments (maximum of 6 credit hours) with the approval of the principal graduate adviser, and from 400-level courses within the department (maximum of 6 credit hours). In no case can more than three 1 credit courses be part of the program of study;

- 2. Students are expected to earn a GPA of 3.0 or above in the core courses and an overall GPA of 3.0. Those who do not meet this requirement will be subject to review by the departmental graduate standards committee. Students who do not perform at a satisfactory level can be placed on probation or terminated from the program;
- 3. Students must choose either the thesis or the comprehensive exam option (described below), and complete the 30 credit hours of graduate coursework required for the degree option chosen;
- 4. Students must complete at least 3 credit hours of graduate work each semester (fall and winter) to maintain their standing in the program;
- 5. Students also must comply with all applicable general graduate academic requirements as listed in the School of Graduate Studies section of this catalog;
- 6. A program of study should be filed by the midpoint of the student's coursework. This should be completed in consultation with the principal graduate adviser or the student's committee chair. However, the plan of study can be modified during the coursework.

Degree Options

The department offers two options for completing the M.A. requirements in sociology. Students pursuing either option will form an advisory committee composed of at least three graduate faculty members.

Comprehensive Exam Option

This option requires 30 hours of graduate coursework. After completion of all coursework, a comprehensive exam must be passed in the areas of sociological theory, research methods and statistics, and a substantive area of the student's choice.

Thesis Option

The requirements for this option are 30 credit hours of graduate coursework. Three to six credits of the 30 hours are received for the master's thesis. An oral defense of the thesis is required. Students who aspire to further study at the doctoral level should select the thesis option.

Interdisciplinary Ph.D. Program Sociology is an academic discipline eligible for full

Sociology is an academic discipline eligible for full participation in UMKC's Interdisciplinary Ph.D. program. Students interested in this study should review the School of Graduate Studies section of this catalog for general and discipline-specific admission criteria, academic regulations and degree requirements. Additional information may be found at the department's Web site, http://www.umkc.edu/sociology. Interested persons may also contact the department's doctoral program adviser at (816) 235-**1744**.

Criminal Justice and Criminology Program

The College of Arts and Sciences offers the bachelor of arts and master of science degrees in criminal justice and criminology (CJC), administered through the Department of Sociology/Criminal Justice and Criminology. Within the context of a liberal arts education, the program offers an interdisciplinary approach to study the criminal justice system. The program is designed to develop the intellectual skills required to function effectively as a field practitioner and to provide the knowledge base for careers as planners, administrators and researchers. The course offerings emphasize issues and problems relevant to policy considerations in criminal justice.

Master of Science: Criminal Justice and Criminology

Description of Program

The M.S. degree in CJC offers coursework that emphasizes policy analysis of criminal justice and criminology issues. The MS-CJC degree may serve as a terminal degree for those seeking appropriate study and academic credentials to qualify for management and administrative positions in justice-related agencies. The degree may also serve as preparation for advanced study in criminology and criminal justice at the doctoral level. Depending upon personal academic or career goals, students may concentrate studies in the treatment and research area, or the area of justice agency development and management.

Admission Requirements

The minimum admission requirements for entrance into the MS-CJC program include the following:

- Completed an undergraduate degree, from an accredited university or college, with coursework in the socio-behavioral sciences sufficient to prepare for graduate-level study in the criminal justice and criminology field;
- Achieved a minimum of 2.75 GPA in all undergraduate work, with a 3.0 GPA for courses within the socio-behavioral sciences area;
- Completed undergraduate courses in statistics, research methods, and theories of crime.

The application process is competitive. Satisfaction of the minimum criteria stated above does not guarantee admission to the graduate program of study. Students are admitted according to their rank in the applicant pool and consideration of the adequacy of departmental resources.

Students who do not meet admission requirements, but who otherwise show promise for graduate work, may be admitted provisionally to the program. Provisional admission means deficiencies must be corrected before a student is fully admitted as a degree-seeking student in the MS-CJC program. Typical deficiencies include a need to take undergraduate coursework to prepare for graduate study in this program, or to demonstrate scholastic ability in graduate-level courses.

Application Procedures

Applicants must submit an application for admission to UMKC and transcripts of their undergraduate work to the university Office of Admissions. Additionally, applicants must submit a writing sample to the department's Admissions Committee. This writing sample should be a two to three page letter requesting admission to the program. In the letter applicants should identify how their undergraduate education and their work or personal experience has prepared them for graduate study in the area of criminal justice and criminology. Also, the letter should address how applicants view study in our graduate program as fitting with their future career or educational goals. The writing sample is to be sent directly to the principal graduate adviser for the MS-CJC program at the department address. Applicants for the winter term must have all materials to the admissions committee by November 1, and those applying for fall semester or summer term admission must have materials in by April 1.

The department strongly recommends that application materials be submitted at least five months before the

anticipated date of initial enrollment to ensure all materials will be on hand in time for review.

Decisions regarding admission to the graduate program are made by the graduate faculty of the program. Materials are reviewed with attention to past academic performance and substantive areas of study that would prepare students for CJC graduate study.

Career Implications of the M.S. in CJC

The master of science degree in criminal justice and criminology is intended to prepare students for careers in field practice, research, administration and program evaluation in public and private justice-related agencies. Students also may find the degree a useful prelude to law school or doctoral study in criminal justice, criminology, sociology, political science or public administration. Career opportunities are not restricted to those traditionally defined as criminal justice (i.e., law enforcement or correctional administration). Options include program planning, policy evaluation and investigative work for state and federal regulatory agencies, management and planning for private security agencies; and research and evaluation for legislative and public and private advisory agencies. Students with the M.S. degree also may find some teaching opportunities open to them, although permanent employment in institutions of higher education usually requires a doctoral degree.

M.S. Degree Requirements

The MS-CJC degree requires successful completion of 30 credit hours of graduate work. Within these 30 hours, students may elect to complete a thesis or pursue the non-thesis option.

A core of six courses is required of all students. The required courses include:

		Hours
CJC 501	Proseminar to the Criminal	2
CIC 590	Justice System	3
CJC 580	Policy and Decision Making	2
	in Criminal Justice	3
CJC/SOC 3	516Intermediate Quantitative Methods	2
CIC 510	(Statistics)	3 3 3
CJC 518	Advanced Theoretical Criminology	3
CJC/SOC 5	510Research Methods I	3
-OR-		
CJC/SOC 5	511Research Methods II	3
In addition,	one of the following courses is required:	
CJC 551	Seminar in Policing	3
CIC 570	Contemporary Corrections and	

CJC 570	Contemporary Corrections and	
	Correctional Policy	3
CJC 575	Correctional Rehabilitation	
	and Treatment	3

The required graduate courses in statistics, research methods and theory demand completion of prerequisite courses in these areas from the student's undergraduate work. Those who have not had such courses may be required to take the preprequisite course(s) prior to enrolling in the graduate course. Beyond the required courses, students must complete an additional 12 hours of academic work. This work may include thesis hours, courses in independent directed studies, classes from the CJC curriculum, or courses from other disciplines. The content of those 12 hours of study will reflect the student's choice with respect to thesis or non-thesis options.

Those electing to write a thesis as part of their graduate work can receive up to 6 hours credit (CJC 599) for preparation of the thesis. In addition to writing the thesis students must successfully complete an oral defense of that thesis before their supervisory committee. The research topic of the thesis will address some issue of specific interest to the student. Through courses, literature review, and analyses conducted in developing the thesis, students are expected to become proficient in their specific thesis topic area.

Those electing the non-thesis option will take coursework and directed studies related to a cognate area. Their 12 hours of study beyond the required courses will address the area of specialization, or cognate area, selected by the student. There are five possible cognate areas from which to choose; i.e., (1) policing, (2) legal aspects of the criminal justice process, (3) corrections, (4) women and crime, and (5) juvenile justice, delinquency and gangs. In their final semester, these students must successfully complete written comprehensive exams covering topic areas from the required courses as well as their cognate area of study.

Students must complete at least 3 hours of graduate work each semester (fall and winter) in order to maintain their standing in the program. At minimum, a 3.0 GPA must be attained in all work offered for graduate credit. Students should consult the General Graduate Academic Regulations and Information section of the UMKC catalog for regulations that apply to all graduate students.

Anthropology Courses

558 Cultures of the African Diaspora (3). The course will explore the cultures of African people and their descendents who settled in Europe, the Caribbean or the Americas due primarily to the impact of the Trans-Atlantic trade in human beings. The focus will be comparative, with emphasis on cultural adaptation, kinship systems, music and religion

580 Special Studies in Anthropology (1-3). An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

580CO CC: African American Experience Through the Prism of Film (3). This course explores the major themes in the African American experience through film and television. Using anthropological and historical analysis, film reception theory, as well as film and cultural criticism, students study a variety of film genres including silent motion pictures, talkies, musicals, all black cast films, documentaries, Hollywood and blaxploitation movies. Students will learn about the motion picture industry and pioneer independent Black Filmmakers especially Oscar Micheaux, Spike Lee, and Julie Dash. The course explores myths, stereotypes and images of African Americans in television and film. Students will interact with local people and organizations involved with African American Cinema such as the African American Film Society of Kansas City, Missouri. The course is offered at the GEM Theater in the History 18th & Vine District.

Criminal Justice and Criminology Courses

500 Sociology of Law (3). A sociological study of the legal system with focus on organizational analyses of the legal profession, courts as a social system, the bureaucratization of the legal process, stratification and the allocation of legal services and careers.

501 Proseminar to the Criminal Justice System (3). This course is designed to address issues affecting the entire criminal justice system. The course addresses aspects of policing, courts and court administration, and the state of American correctional practices.

510 Sociological Methods I (3). A survey of methods used by sociologists: selection and formulation of problem, research design, survey research, participant observation, sampling, reliability and validity, and use of scales, and data analysis. Crosslisted with SOC 510. Offered: Fall.

511 Sociological Methods II (3). Quantitative research is the primary focus of the course; emphasis is placed on problem formulation; research design; sampling procedures, questionnaire construction and interviewing techniques; data collection; problems of scaling, computer statistical programs; linking appropriate statistical analyses with data analysis; and report writing. Cross listed with SOC 511. Prerequisite: Undergraduate course in research methods.

516 Intermediate Statistics (3). A systematic development of the logic and practice of selected statistical methods used in sociological research. Included are analysis of variance and covariance, regression analysis, multiple contingency, and non-parametric tests. Prerequisite: Introductory Statistics. Crosslisted with SOC 516.

518 Advanced Criminological Theory (3). This course provides an understanding of past as well as present criminological theories by examining each criminological tradition (beginning in the 18th century and continuing into the present.) The primary aim of the course is to determine the root causes

of deviant and criminal behaviors. Moreover, this course offers special attention to how society has historically reacted and responded to crime and deviant behavior. Furthermore, by examining crime and deviant behavior from a historical context, the students are able to determine how criminological theories have influenced public policies designed to reduce and control criminal behavior. In the final analysis, students will examine the rationales that society use to justify efforts toward punishment and treatment.

530 Crime and the Public Health Care System (3). This course will focus on how crime affects the public health care industry. Special attention will be given to the integration of criminal justice and public health care strategies to address the crime problem, reduction of victimization, and expensive medical costs.

540 Criminal Justice Organization and Management (3). The purpose of this class is to introduce the student to the police, courts and corrections from, an organizational perspective. First, this class discusses organizational theory, the idea of open and closed systems, the relationship of organizations to its environment and the concept of the organizational goal. Next, this class will address management issues and individual and group behavior in organizations. Finally, this class will discuss organizational change, and the requisite modifications for the implementation of change in organizations.

551 Seminar in Policing (3). This course addresses the important topics related to the institution of policing. Through readings and class discussions, students will gain a better understanding of both historical aspects of policing as well as the future of policing. Topics include selection, training and socialization, police management, deviance and corruption, use of force, community oriented policing.

570 Contemporary Corrections and Correctional Policy (3). Present-day correctional alternatives are considered regarding the correctional policy that is, or potentially can be, carried out within the various programs. Prisons, probation, parole community-based programs are evaluated as to the theory of punishment demonstrated within these programs. Emphasis is placed on what constitutes a rational and workable corrections policy and the form of correctional programs needed to realize such policy.

571 Legal Aspects of Criminal Justice Professionals (3). This course is designed to acquaint students with the powers that correctional administrators enjoy. In the final analysis, the course addresses the legal liabilities that administrators face if they infringe on the rights of people in the places of confinement.

575 Correctional Rehabilitation and Treatment (3). This course will begin with a thorough examination of the rise, fall, and recent resurrection of "rehabilitation and treatment" in American Correctional strategies. Both past and current treatment strategies will be studied regarding their effectiveness in reducing recidivism. This will be done through a survey of the quantitative literature base. There will be some emphasis on treating special needs offenders (e.g., sex offenders, juvenile offenders, offenders with developmental disabilities or mental illnesses.

576 Seminar in Criminal Justice and Criminology Issues (3). This course is an advanced exploration of the relationship between the criminal jusitice system and criminal behavior from at least one of the following perspectives: psychological, sociological, economic, legal, political or administration/ management. Will include discussions and analysis of contemporary readings and on-going research in the selected perspective.

580 Seminar: Policy and Decision Making in Criminal Justice (3). The focus of the course is the nature and scope of policy and decision-making processes in legal institutions and law enforcement bureaucracies.

590 Directed Studies in Criminal Justice and Criminology (1-3). Individual research and study in the student's field of interest as approved and directed by major professors. The work involves examination and reporting of selected problems affecting the various agencies of our legal system. A. Law Enforcement B. Court Operations and Administration C. Corrections D. Legal Theory and Philosophy E. Criminological Theory F. Sociology of Law

599 Research and Thesis (1-6). Directed specialized research. Before writing a thesis, the student must clear the topic and research design with the Supervisory Committee.

699 Dissertation Research (1-12). Individual directed research leading to preparation and completion of doctoral dissertation. Prerequisites: PH.D course requirements completed. Offered: Every Fall, Every Winter, Every Summer.

899 Required Graduate Enrollment (1).

Sociology Courses

501 Social Theory I (3). Examines the development of social theory in Europe up to the beginning of the twentieth century, with a focus on its intellectual precursors of social theory, debates over the nature of society, and controversies over the distinct features of sociology as an emerging academic discipline. The major perspectives covered include the intellectual origins of

sociological thought in Great Britain, France, and Germany, and the debates as reflected in the writings of Karl Marx, Emile Durkheim, Max Weber, and Georg Simmel. Prerequisite: undergraduate course in Sociological Theory. Offered: Fall.

502 Social Theory II (3). Examines the major sociological theories developed during the twentieth century and contemporary debates over the nature of society and the nature of our knowledge about society. Theories to be examined include behaviorism, symbolic interactionism, structural functionalism, phenomenology, conflict theory, postmodernism, those that attempt to integrate social agency and structure, and feminist theory. Prerequisite: Sociology 501. Offered: Winter.

503 Controversies in Contemporary Social Theory and Practice (3). This course critically examines central issues in contemporary debates among social theorists over the nature of society and how it should be studied. Offered: Fall

506 Colloquium: Research and Dissertation Project (3). A colloquium of Ph.D. students to be taken during the Fall semester of their second year in the program. Students will be guided to develop their dissertation proposal under faculty direction and exchange their experience. The focus of the seminar is on students developing and refining a research agenda that will eventually result in their dissertation proposal. Issues to be addressed include how to state the research question, how to identify and evaluate theoretical perspectives, how to review the literature, how to determine the methodology to be used as well as the options for data collection, and how to put all of this information into a readable and operational research proposal. Note: Fall.

510 Sociological Methods I (3). A survey of methods used by sociologists: selection and formulation of problem, research design, survey research, participant observation, sampling, reliability and validity, use of scales, and data analysis. Crosslisted with CJC 510. Offered: Fall

511 Sociological Methods II (3). Quantitative research is the primary focus of the course; emphasis is placed on problem formulation; research design; sampling procedures; questionnaire construction and interviewing techniques; data collection; problems of scaling, validity and reliability; uses of secondary data sets; data analyses and report writing. Crosslisted with CJC 511. Prerequisite: Undergraduate course in research methods. Offered: Winter.

512 Qualitative Methodology (3). Experience in field research and participant observation methodology with focus on the research process including the role of the researcher, data collection and analysis, ethical issues, and the value and limitation of qualitative methodologies. Prerequisite: One semester of research methods.

516 Intermediate Statistics (3). A systematic development of the logic and practice of selected statistical methods used in sociological research. Included are analysis of variance and covariance, regression analysis, multiple contingency, and non-parametric tests. Prerequisite: Introductory Statistics. Crosslisted with CJC 516.

523 Sociology of Deviance (3). A seminar devoted to a critical examination of the predominant studies on the subject as well as to a discussion of some of the major forms of deviance in contemporary American society.

525 Complex Organizations (3). Examination of the more important studies and theories concerning organizations such as business, factories, governmental bureaus, churches and universities. The communication-decision process, status system, socialization, legitimization of power, and the interrelationships of formal structures.

540 Urban Social Structure (3). An examination of the social structure of the American city with special reference to the historical development of American cities. Attention will be focused on the role of social institutions as they have changed in relation to urban problems.

556 Aging and Developmental Disabilities (2). This course explores the experience of aging with a developmental disability or mental retardation within the context or normative aging. Among the comparisons made between older persons with and without developmental disabilities are their demographic characteristics, physical and cognitive functioning, role transitions and losses, identities and self-concepts, and family and caregiving issues. Policies, programs, and emerging concepts of best practices are considered within the context of quality of life, ethical, and community inclusion bases.

557 Practicum in Aging and Developmental Disabilities (1). Students gain experience in working with and defining issues of older persons with developmental disabilities through placements in sheltered workshops, senior centers, residential group homes, and other community-based programs. Students must be simultaneously enrolled in Sociology 556.

558 Cultures of the African Diaspora (3). The course will explore the cultures of African people and their descendents who settled in Europe, the Caribbean or the Americas due primarily to the impact of the Trans-Atlantic trade in human beings. The focus will be comparative, with emphasis on cultural adaptation, kinship systems, music and religion

560 Sociology of Death and Dying (3). This course examines attitudes, behaviors, and institutions related to death and dying in contemporary American society. Topics include the meanings of death in American society, social settings for dying, interaction with the dying, customs and practices surrounding death, role transitions of survivors, and suicide. Special attention is given to issues of aging and dying.

580 Special Studies in Sociology (1-3). An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

580U Special Topics in Sociology (1-3).

595 Directed Research Experience (3). Research project supervised by faculty.

597 Independent Readings (1-3). Intensive readings in an area selected by the student with prior consultation with the instructor.

599 Thesis and Research (1-6). Directed specialized research. Before writing a thesis, the student must clear the topic and research design with the Supervisory Committee. The course also involves the writing of the thesis.

699 Dissertation Research (1-12). Individual directed research leading to preparation and completion of doctoral dissertation.

899 Required Graduate Enrollment (1).

Department of Theatre

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Mailing Address

University of Missouri-Kansas City Department of Theatre PAC 408 5100 Rockhill Road Kansas City, MO 64110-2499

Department Chair:

Tom Mardikes Curators' Professor:

Felicia Londré

Professors:

John Ezell, Barry Kyle, Jennifer Martin

Associate Professors

Louis Colaianni, Lindsay Davis, Tom Mardikes, Joe Price, Ronald Schaeffer, Victor Tan

Assistant Professors:

Gene Friedman, Chuck Hayes, Gary Holcombe Visiting Professors:

Peter Altman, Dennis Rosa

Visiting Associate Professors: Stephen Buescher, Joe Krienke and Stephanie Thompson are in residence teaching physical theatre skills for graduate actors.

Professors Emeriti:

Jacques Burdick, Cal Pritner, Douglas Taylor Associate Professor Emeritus:

Vincent Scassellati

Department Description

The Department of Theatre offers a bachelor of arts degree, a master of arts degree centered in theater history and dramatic literature or playwriting and dramaturgy, and a master of fine arts degree in acting, design or technology. The department has a unique mandate. It is the only department in the state system of Missouri empowered to grant the M.F.A. degree in theater, the terminal degree for candidates preparing for a career in the professional theater. Accordingly, the main thrust of the department is its master of fine arts programs that prepare professional actors, designers and technicians for the regional repertory and commercial production companies of the United States. Training in the master of fine arts programs is performance and production oriented. The unique arrangement by which the Department of Theatre and the Missouri Repertory Theatre coexist, interact and support each other while using the same facilities provides ideal opportunities for the candidates.

A training ensemble of experienced professionals is maintained to teach the classes and address candidates' needs. In addition to the regular faculty, guest directors and visiting teachers are brought in from the professional world outside and from the ranks of the Missouri Repertory Theatre to enhance training opportunities. Accreditation is by the National Association of Schools of Theater. The Department also is a member of the University/Resident Theatre Association.

Master of Arts

The M.A. degree in theater is a research-oriented, two-year degree that will prepare students for admission to Ph.D.

programs. Students may plan their programs centered on theater history and dramatic literature or playwriting and dramaturgy. Opportunities exist for M.A. students to serve as dramaturg or assistant to the director of academic and professional productions. A thesis is required to complete the degree. M.A. students are subject to the General Graduate Academic Requirements of the University for graduate study.

Master of Fine Arts: Acting

The acting program is a three-year, minimum 60-credit-hour professional actor-training program interacting with the Missouri Repertory Theatre, a professional Equity LORT B Theatre. M.F.A. students are subject to the General Graduate Academic Requirements of the University for graduate study.

The **First Year** of training is a highly disciplined, process-oriented period of study including: a morning group warm-up; collaboration class integrating students and faculty from each area of study; intensive Linklater voice production; basic speech work; text analysis; reading aloud; individualized fitness and nutritional programs, alignment and self-use process; physical approaches to characterization including physical isolations and effort shape; neutral, extreme and character mask work; acrobatics; ballroom and ballet or modern dance; and the actor's process based on Stanislavskian principles of theatrical truth; building a character; and ensemble play. Performance work includes the first-year social issues project, a Shakespearean project and a contemporary character project.

In the **Second Year** of training the student actor continues with a morning warm-up collaboration class; Linklater voice production integrated with intensive speech work; a study of dialect that includes a primary source project (with a study of movement patterns as well as dialects); private and ensemble singing; stage combat (unarmed, rapier, dagger, broad sword and quarter staff); subtle energy work; period-style movement including social convention and dance; Commedia dell' arte characterization, mask work and personal clown; continued work on acting Shakespeare; intensive work on Moliere verse text integrated with the period-style movement; restoration or other heightened language text; and application of the actors process to audition technique and contemporary text. Second-year actors begin public performance work with guest and faculty directors on new, contemporary and period plays chosen specifically for the training needs of the second-year class. Occasionally, roles at the Missouri Repertory Theatre are available for second-year actors.

Third Year actors continue to apply their craft to challenging studies in Shakespeare, Shaw, Shepard, etc.; ongoing solo and ensemble exploration in personal clown; foil and saber fencing; singing; tutorials in speech and movement; and audio drama, voice over and extensive acting for the camera. Public performance work intensifies with specific productions chosen to challenge the actor's art within the training program. Actors also audition for a Missouri Repertory production and are cast, when appropriate, in roles or as understudies. Actors also audition and perform, when appropriate, in other Kansas City professional Equity theatres. The year ends with a production chosen for the class with a guest director of national prominence. In May, the actors are showcased in New York as part of the New League showcase sponsored by the Alliance for the Development of Theatre Artists, Inc.

Retention

In addition to being expected to maintain at least a 3.0 grade-point average, all M.F.A. acting candidates will be evaluated by the performance faculty at the end of each semester to determine whether they have shown satisfactory progress to warrant continuation in the program.

Master of Fine Arts: Design and Technology

Students majoring in design and technology may choose to specialize in a design area (scenic design, costume design or costume technology, lighting design, sound design), technical direction or stage management.

The design/technology track is a three-year program requiring a minimum of 60 credit hours. Those choosing a design emphasis will be prepared to compete for United Scenic Artist Local 829 membership as scenic designers, lighting designers, costume designers or sound designers. They also will be prepared to design in professional theatre centers and in major universities and colleges. Candidates specializing in technology will be trained to compete for jobs as technical directors or assistant technical directors and other supervisory technical positions, or other entertainment-business-related positions.

The portfolio to be presented for admission should include:

- 1. Artistic renderings;
- 2. Drafted materials;
- 3. Photographs and slides;
- 4. Resume and references.

Stage management candidates also have a three-year, 60-credit-hour program. They serve as assistant stage managers the first semester or first year, as stage managers the second year, and serve a residency in the last semester. They also work as production assistants for the Missouri Repertory Theatre shows. Candidates in stage management are trained to compete for jobs as Actors' Equity stage managers and take classes on the Actors' Equity LORT rule book.

Only students who have demonstrated satisfactory progress in required skills and professional discipline during the first year will be invited by the faculty to return for a second year. During the second year, the design and technology students will concentrate on areas of interest, choosing advanced courses and working in the appropriate production areas. Third-year residency allows students to continue to emphasize design or technology coursework while undertaking major design or technology projects with productions in the Department of Theatre, the Missouri Repertory Theatre or other professional environments. The concluding requirements of the M.F.A. degree for the design and technology candidate will be classroom projects, produced work and final presentations of portfolios. M.F.A. students are subject to the General Graduate Academic Requirements of the University for graduate study.

Assistantships

Graduate assistantships are available in the following areas: acting, costume, lighting, stage management, scene shop carpentry, scene painting, sound, property construction, house management, technical direction, publicity and departmental assistance with THEAT 130, (Foundations of Fine Arts: Theater).

Theater Courses

500RA Theater Collaboration (1-2). A course for M.F.A. students exploring the collaboration/ communication process in preparing a production. Must be elected by all students assigned to design, direct, technical direct or stage manage within the current or the following semester. Maximum of 8 hours applicable towards degree.

501R Voice Training (2). (A,B,C,D) Training for the speaking and singing voice, development of skills in vocal dynamics, physical control, and relaxation for the actor, dialects and verse structure. Four semesters required for acting emphasis.

507 19th-Century Continental Theater (3). Production of significant French, German, Russian, Spanish, and Scandinavian plays and playwriting of the 19th century. Particular emphasis will be given to plays representative of

romanticism, realism, naturalism, fin-de-siecle decadence, and intensive study of production history.

508 20th-Century Continental Theater (3). Study of the production of significant plays of Continental Europe from Strindberg to the present. Dramatic literature will be related to artistic currents such as expressionism, surrealism, the absurd, and where applicable, to political currents.

509 Russian Drama and Theater (3). Study of the production of Russian and Soviet plays with reference to the development of theater art from the Christianization of Russia to contemporary Soviet drama.

510 History of the American Theater I (3). An exploration of the trends in and the development of the American theater from Colonial times to 1900.

511 History of the American Theater II (3). An exploration of the trends in and the development of the American theater for 1900 to the present.

512R History of the English Stage I (3). The English stage and its arts, crafts and literature from the medieval cycles through the Restoration.

513 History of the English Stage II (3). Development of English and Irish theater art and dramatic literature from the 18th century to the present.

514 History of Design and Technology I (3). The study of period style and scenic, costume, lighting, and technical production practices from the ancient world through the 17th century. The course will emphasize the application of research toward the presentation of period plays and contemporary production.

515R History of Design and Technology II (3). The study of period style and scenic, costume, lighting, and technical production practices from the 18th century to the present. The course will emphasize the application of research toward the presentation of period plays and contemporary production.

516A Technical Production for the Practitioner (3). The course is an in-depth review of technologies in scenery, lighting and stage operations, expansion of that knowledge, and application of it to the individual class member's particular theater. Classroom material is augmented by hands-on experience in a controlled laboratory situation. Students should have a prerequisite of a basic technical theater course or considerable practical experience. This course can be repeated for credit.

516B Technical Production for the Practitioner (3). See course description for theater 516A.

520 Individual Performance Studies (1-2). (A,B,C) Private instruction for the advanced student. Prerequisite: Permission of the faculty member with whom the student will be studying.

521A Professional Sound Design (3). Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

530 Drafting for the Theater (3). Practical laboratory course in drafting for the theatre encompassing floor plans, sections, designer's evaluations, front and rear elevations, working drawings, and problems in communicating design ideas. Fall semester.

531R Rendering Techniques for the Theater Designer II (3). Continuation of Rendering Techniques with the introduction of color, pastels, watercolor and goauche. Skills are applied in developing projects for design in the theater.

532 Professional Costume Design (3). (A, B, C, D) The courses in Professional Costume Design are intended to develop the costume designer's skills in research, rendering and drawing. Each section will deal with specific problems of design, such as period, line, silhouette, color and texture. Specific problems in design from realistic to stylized productions will be worked on by the students. The course may be taken once or twice by non-costume designers with the full cycle being required for costume emphasis.

534 Costume Construction I (3). (A,B,C) Research and methodology into one or more of the following areas of costume construction for the stage: period pattern and tailoring adaptation, work with non-woven materials, and the cutting and finishing of costumes for the stage. May be repeated up to six hours with content change and permission of instructor.

535 Technical Studies in Costuming and Makeup (3). (A,B,C) Concentration in one or more of the arts and crafts necessary to costume design. Areas to be chosen from include: fabric dyeing and painting, millinery, wig design and construction, latex prosthetic, and decorative accessories for the stage. May be repeated up to six hours with content change and permission of instructor.

536 Professional Scene Design (3). (A,B,C,D) Professional Scene Design is a series of courses constructed to develop the designer's skills from research and initial sketches to finished renderings, models and working drawings. Each

successive section deals with problems of increasing complexity beginning with one-set realistic productions through unit-settings, stylization and multiple setting problems. The course may be taken once or twice for non-set designers with the full cycle being required for the scene design emphasis.

538 Scene Painting (3). A practicum course in scene painting techniques and execution. Introduction to painting equipment and supplies, priming and preparation of surfaces and materials, standard techniques for painting ornament.

539 Scene Painting II (3). A practicum course in scene painting techniques with emphasis on painting interior drops, exterior landscapes and three-dimensional pieces.

540 Pattern Drafting And Cutting (3). Theory and laboratory study of the techniques and methods employed in drafting patterns for the professional stage.

545 Professional Acting Techniques I (3). Theater games, exercises, mask work, and some scene study to develop the first year acting/directing class into a training ensemble, instill a clear and uniform vocabulary, heighten awareness, and begin concentrated skill work. The semester will culminate in a class project.

546 Professional Acting Techniques II (3). Continuation of Acting 545 with emphasis on the application of the first semester's work through scene study of contemporary plays and monologues.

547 Professional Acting Techniques III (3). Concentration on non-naturalistic styles. Work on scenes from Shakespeare and other classical playwrights.

548 Professional Acting Techniques IV (3). Work on audition material and further scene work dealing with specific individual acting problems.

549 Master Class in Acting (2). (A,B,C,D) Class in advanced studies in acting. May be repeated for credit up to eight hours as content and guest artist change. Permission of instructor or head of area required. Required for third year graduate acting students in the fall semester and may be repeated subsequently as elective.

551 Rendering Techniques for the Theater Designer III (3). Developing techniques for rendering in realistic settings: interiors, landscapes, fabric and furnishings.

552R Rendering Techniques for the Theater Designer IV (3). Developing techniques for rendering in non-realistic styles with the emphasis on imaginative designs, light and air, created textures, etc.

557 Theatre History I (3). Development of theatre art-including dramatic literature, staging, and performance styles-from the beginning through the 17th century. This course also looks at Asian theatre forms. Students read approximately 20 plays. Prerequisite: Graduate Status Offered: Every Fall

560 Theatre History II (3). Development of western theatre art-including dramatic literature, staging, and performance styles-from the 18th century to the present. Students will read approximately 24 plays Prerequisite: Graduate status Offered: Every winter

562 Actor Practicum (3). A contemporary scene study class for actors. Actors test their acquired process skills with major emphasis placed on characterization.

563 Text Analysis I (3). Linear analysis of selected prose dramas with concentration on character delineation, images and motivation for actors and directors.

564 Text Analysis II (3). Continuation of Theater 563 with emphasis on verse plays. Selected playwrights from the Greek and Elizabethan periods will be included along with modern verse dramatists.

565 Introduction to Professional Directing (3). The first part of the class is devoted to an intensive study of various and diverse concepts related to the dramatic experience by dramatists, critics, and directors. The class also examines current production methods and practices for today's functioning professional director. Systems related to stage management and actors are investigated.

567 Professional Directing Practicum (3). This class will move from concept to production. Work will revolve around the presentation of production concept statements in which the director will select, organize and articulate the theatrical substance in support of his or her chosen concept. Intensive analysis will lead to the development of an image/metaphor for production. Term will include presentation of a full book justifying concept choices for scenic, costume, music and dance, and, finally, full production.

568 Seminar in Dramaturgy (3). Critical analysis of dramatic structure and techniques, with special reference to modern and contemporary drama.

569 Master Class in Directing (2). (A,B,C,D) Class in advanced studies in directing. May be repeated for credit up to eight hours as new material and guest artist change. Permission of instructor or head of area required. Graduate students elect theater 569.

570 Professional Lighting Design (3). (A, B, C, D) Professional Lighting Design is a series of courses concerned with the study of light as a design element. Projects to implement design theory are primarily selected from the areas of dramatic, musical and opera theater, and dance. Emphasis is on the design process with each successive section dealing with problems of increasing complexity. Areas of study and projects are chosen on the basis of individual levels of development. When elected by non-lighting designers the course may be elected for a maximum of two semesters.

572 Stage Lighting Equipment (2). A comprehensive study of contemporary technical equipment and its usage to actualize a lighting design. Areas of emphasis include instruments, color and color theory, lighting control systems, projection, and optical special effects.

573 Professional Technical Production (3). Detailed study and experimentation with recent scenic materials, scenery construction, rigging systems, use of metal and special effects.

574 Theater Regulations, Laws and Safety (1). Survey of fire, city and Equity codes, and insurance, liability, health rules and regulations related to theater operation. Union and legal contracts, philosophy and relations with theater facilities and operations.

575R Property Construction (3). Construction techniques and materials used to make and modify set and hand properties and set dressing.

577 Advanced Materials (3). (A,B,C,D) The theater technician and designer are dependent on a wide range of materials in the creation of their art. Each semester the student will pursue detailed study of a material area (i.e., wood, metal, plastics, textiles), the processes of its usage and its related process-products (i.e., adhesives, paints, dyes, etc.). Field trips and hands-on laboratory work are integral to the course.

578 Professional Theater Administration (3). Theories, problems and techniques preparing the student for effective interaction with professional theater administration, offering a foundation for potential theater administrators as well as enrichment for students of directing, design, technical and stage management.

579R Master Class in Design (2). (A,B,C,D) Class in advanced studies in design. May be repeated for credit up to eight hours as content and guest artist change. Permission of instructor or head of area required. Graduate students elect theater 579.

580R Graduate Technical Student Seminar (2). (A,B,C,D,E,F) Required in every semester for Design/Tech M.F.A. candidates choosing a technology emphasis. This continuing seminar course serves as a forum for all graduate technical students to analyze and discuss problems and solutions on current academic and MRT productions. The course develops collaborative skills through the sharing of ideas and experiences. In addition, topics of general interest to the technician will be studied through guest lecturers and/or individual projects prepared by the faculty and students and presented to the class.

583 Seminar on Technical Production Management (2). Seminar involving shop organization, scheduling, purchasing, lending and borrowing, rentals, personnel, job description, organizing structure, etc. Emphasis upon organization and techniques for repertory theater operation.

584 Master Class in Technology (2). (A,B,C,D) Class in advanced studies in technology. May be repeated for credit up to eight hours as content and guest artist change. Permission of instructor or head of area required.

585 Advanced Technical Drafting (3). An intensive drafting course required for Design/Tech M.F.A. candidates with emphasis in technology. The course aims to equip the student to prepare clear shop working drawings from designer elevations. Topics include both conceptual planning techniques and developing mechanical drawing skills. One hour lecture, four lab hours, and extensive outside preparation. Previous completion of Theater 430 strongly suggested.

586 Structural Design for the Stage (3). A course in the structural design of scenic elements. The student learns to work within the visual restrictions imposed by the designer to build structures that will bear given load requirements with a minimum of deflection. Basic engineering and load analysis principles are studied and applied in the design procedure to find the best possible solutions in terms of strength, weight, safety and cost.

590 Directed Graduate Studies (3-6). Individual projects on the graduate level. No more than three hours with any one instructor. Prerequisite: Consent of the instructor. Only one 590 each semester.

590A Directed Graduate Studies (3-6).

590B Directed Graduate Studies: Design (3-6).

590C Directed Graduate Studies: Costumes (3-6).

590D Directed Graduate Studies: Scenic Design (3-6).

590E Directed Graduate Studies: Directing (3-6).

590F Directed Graduate Studies (3-6).

590G Directed Graduate Studies: Lighting (3-6).

590H Directed Graduate Studies: Playwriting (3-6).

590I Directed Graduate Studies (3-6).

590J Directed Graduate Studies: Stage Management (3-6).

590K Directed Graduate Studies: Technical Production (3-6).

590L Directed Graduate Studies: Theater Management (3-6).

590M Directed Graduate Studies: Theory and Criticism (3-6).

590N Directed Graduate Studies: Dramaturgy (3-6).

590R Directed Graduate Studies (3-6).

590S Directed Graduate Studies (3-6).

590T Directed Graduate Studies (3-6).

592A Seminar on Stage Management Practice (1). MFA student stage managers meet one hour a week with the Production Manager of of both Missour Repertory Theatre and Department of Theatre (and head of stage management training), to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre. Prerequisite: None, except to be a Graduate Stage Management Student. Offered: Fall and Winter Semesters

597 Repertory Theater: Internship (3-6). Assignments available in the following areas: directing, design, carpentry, lighting, costume, props, acting, stage management. Technical interns will be assigned by the appropriate heads of those areas. Acting interns may understudy and/or play roles with the Missouri Repertory on the Spencer stage or in showcase productions. Also, interns will have some responsibility in technical areas such as change-over, props, costume, running crew, and stage management. Directing interns may assist director or assistant stage manager. Prerequisite: Selection by chairman of department.

598R Research and Performance (1-6). Primarily for the M.F.A. student. Permission of the graduate faculty.

599 Research and Thesis (1-6).

697 Repertory Theater: Residency (6). The residency consists of authorized participation with the Missouri Repertory Theatre, the Department of Theater, or an approved outside professional company, and is arranged under departmental advisement, with the chairman of the department, and in consultation with the artistic director of MRT. The assignment will be determined by matching interest and degree emphasis with available production assignments.

899 Required Graduate Enrollment (1).

School of Biological Sciences

114 Biological Sciences Building 5007 Rockhill Road (816) 235-**5246** Fax: (816) 235-**5158** (816) 235-**2352** (Graduate Programs) sbs-grad@umkc.edu (Graduate Programs) http://www.umkc.edu/sbs

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University of Missouri-Kansas City School of Biological Sciences 5100 Rockhill Road Kansas City, MO 64110-2499

Dean:

Lawrence A. Dreyfus Associate Dean, Graduate Programs: Jakob H. Waterborg Coordinator, Undergraduate Programs: Lynda S. Plamann Interim Head, Division of Molecular Biology and Biochemistry: Anthony Persechini Head, Division of Cell Biology and Biophysics: George J. Thomas, Jr.

History and Description of School

The School of Biological Sciences was established (originally as the School of Basic Life Sciences) in 1985. The school's vision is "to better the quality of life through excellence in education and research." This vision is realized through the provision of quality education at the undergraduate and graduate levels, the expansion of knowledge through scientific research, and the application of scientific information for the advancement of human welfare. The School has been designated as an eminence program by the curators of the University of Missouri, and as such is a unit targeted for expansion and development.

Research by faculty, graduate and undergraduate students is focused on cellular and molecular aspects of modern biology, with emphases in molecular genetics, cell biology and structural biology. Advances in these areas will provide fundamental knowledge for biotechnology, molecular medicine, environmental remediation and computational biology. Students are encouraged to gain hands-on research experience, involving them in the process of creating knowledge and equipping them to shape the future.

Quality curriculum combined with research-active faculty and state-of-the-art equipment, provide students an outstanding opportunity to expand critical thinking and problem solving-skills while developing an in-depth understanding of the molecular, cellular, and genetic foundations of biological sciences.

Graduate Programs

The School of Biological Sciences offers programs of study leading to a master of science degree in cellular and molecular biology. In addition, a master of arts degree in biology is offered. The school participates in UMKC's Interdisciplinary Ph.D. program in cell biology/biophysics and molecular biology/biochemistry.

Graduates with research experience in cell biology and biophysics or molecular biology and biochemistry may enter careers in many areas, including biotechnology, pharmaceutics, academia, or governmental research involving the environment, agriculture, energy, defense or health.

Graduate Admissions

Admission to the school's graduate programs is competitive and students are encouraged to apply early. Applications are reviewed by an admissions committee that evaluates students on the basis of past performance and evidence of ability to pursue graduate studies successfully. The school admits students to its doctoral and master's degree programs throughout the year; however, early application (by February 15) is advised to receive consideration for assistantships and other financial support.

Information on admission to master's or Ph.D. degree programs may be found at the Graduate Programs Web site at http://www.umkc.edu/sbs/graduate, in the Graduate Academic Regulations and Information section of this catalog, by e-mail to sbs-grad@umkc.edu, or by writing to our graduate programs office at the mailing address at the beginning of this section.

Graduate teaching assistantships, graduate research assistantships and fellowships are available through the school and are awarded on a competitive basis. Currently, all fully admitted, full-time doctoral students receive financial support.

To be eligible for admission to the School of Biological Sciences' graduate programs, the applicant must:

- Possess a bachelor's degree in biological sciences or a related field with a minimum of 120 credit hours, or possess an advanced degree in a health sciences field.
- Have an undergraduate GPA of at least 3.0.
- Have sufficient background coursework to undertake graduate studies in biological sciences.
- Have acceptable scores in the Graduate Record Examination aptitude tests.
- Submit three letters of recommendation from individuals familiar with the student's academic performance and scientific abilities.

Students may be admitted with certain deficiencies, with the stipulation that these can be removed early in the course of study.

Advising

New students will be advised by the principal graduate adviser until they have selected their permanent research adviser. The graduate programs office will contact students in advance of their first semester for information about advising and registration.

Students are responsible for becoming familiar with all academic regulations of the campus as outlined in the catalog and in other university documents.

Laboratories

The School of Biological Sciences has modern, well-equipped laboratories organized into the following divisions:

Division of Cell Biology and Biophysics

This division houses the laboratories of anatomy, biophysics, developmental biology, cell biology, microbiology, neurobiology, structural biology and virology.

Division of Molecular Biology and Biochemistry

This division houses the laboratories of biochemistry, genetics, genetic engineering, membrane biochemistry, molecular biology, macromolecular structure, neurophysiology and cellular and molecular physiology.

Organizations and Activities

A campuswide biological sciences seminar program is organized and administered by the school. Throughout the year, weekly advanced research seminars are held featuring presentations by nationally recognized visiting scientists and campus faculty. The School of Biological Sciences has both graduate and undergraduate student organizations that meet periodically for scientific discussions and social events.

Requirements for Retention in the School of Biological Sciences Graduate Programs

General requirements for retention of graduate students are described in the Graduate Academic Regulations and Information section of this catalog. For all graduate students, a 3.0 (B) GPA is required for satisfactory progress. No F grades are permitted.

Doctoral degree students must earn a grade of B or better in LSMBB 561/562. Any doctoral student who receives more than one C grade in a basic course will be dropped from the doctoral program.

Any master's student who receives more than two C grades or more than one C and one D grade in graduate courses will be dropped from the program.

Master of Science in Cellular and Molecular Biology

Degree Requirements

Thesis option	Hours
LSMBB 561/562 General Biochemistry I and II	8
LSMBB 611 or LSCBB 612 Seminar	1
LSMBB 599 or LSCBB 599 Thesis research	6
Electives	15
Total	30

Elective courses may be selected from the following list or from other alternatives approved by the School of Biological Sciences Graduate Programs Committee: LSCBB 505, 520, 530, 566, 569, 596, 597; LSMBB 503, 565, 567, 596, 597. A limited number of credit hours of upper-level undergraduate courses may be allowed.

Students pursuing the thesis option must also satisfactorily complete written and oral thesis exams.

Non-thesis option	Hours
LSMBB 561/562 General Biochemistry I and II	8
LSMBB 611 or LSCBB 612 Seminar	1
M.S. Topics BIOL 593	3
Electives	24
Total	36

Elective courses may be selected from the following list or from other alternatives approved by the School of Biological Sciences Graduate Programs Committee: LSCBB 505, 520, 530, 538, 566, 569, 596, 597; LSMBB 503, 538, 565, 567, 596, 597. A limited number of credit hours of upper-level undergraduate courses may be allowed.

Emphasis in Bioinformatics

The emphasis in bioinformatics is a degree option with specific requirements.

This degree option trains students in the fundamental principles of Bioinformatics and prepares them for careers in research, medical and corporate settings. Students will learn how to manage and analyze data stored in databases, become familiar with the various computational tools and techniques available to analyze biological data, become familiar with the types of questions and problems within Biology that lend themselves to bioinformatics analysis, and gain proficiency with a variety of statistical techniques necessary to analyze genomic, proteomic, and integrated biological data sets. *Emphasis requirements, in addition to the specified degree requirements.*

Required electives:	Hours
BDS 508 Statistical Analysis in Business	
-or-	
BIS 502 Management Information Systems	3
BIOL 519 Principles of Evolution	3
BIOL 525 Bioinformatics and Data Analysis	3
Total	9

Master of Arts in Biology

Degree Requirements

The master of arts program of study requires a minimum of 36 credit hours. No more than 40 percent of the program may be at the 300- to 400-level; the balance must be at the 500-level or above. Master of Arts Topics in Biology, BIOL 592, is required on an approved topic for an extensive investigation with oral presentation. This investigation may be accomplished through literature search or laboratory experimentation. No more than 6 hours of BIOL 591, Directed Individual Studies, may be applied to this program.

Students typically pursue the master of arts in biology and a certificate in the Truman Medical Center Nurse Anesthesia Program concurrently. For information about admission and degree requirements, students interested in the CRNA certificate should first contact the School of Nurse Anesthesia at Truman Medical Center, and then contact the School of Biological Sciences. Admission by both programs is required.

Doctor of Philosophy

The Ph.D. program at UMKC is interdisciplinary. Students interested in studies at the doctoral level in the disciplines of cell biology and biophysics, *or* molecular biology and biochemistry, apply to the Interdisciplinary Ph.D. program in the School of Graduate Studies. Students interested in a combination of cell biology and biophysics *with* molecular biology and biochemistry should apply to our graduate programs at http://www.umkc.edu/sbs/graduate or by writing to the mailing address at the beginning of this section.

Detailed information on the general and discipline-specific admission requirements for the Ph.D. is found in the School of Graduate Studies section of this catalog, with specific details on the school's Web site at http://www.umkc.edu/sbs/graduate.

Students pursuing Interdisciplinary Ph.D. studies who have selected cell biology and biophysics, or molecular biology and biochemistry as one of their disciplines should consult the School of Graduate Studies section of this catalog for degree requirements and other academic regulations applicable to their degree program.

Biology Courses

519 Principles of Evolution (3). Synthesis of the modern concepts of evolution. Discussion of the biological processes that produce organic diversity through phyletic change. Discussed are variation, mutation, population genetics, natural selection and adaptation. Three hours lecture a week. Prerequisites: BIOL 206 or consent of instructor.

525 Bioinformatics and Data Analysis (3). Methods and procedures for the storage, retrieval and analysis of information in biomolecular and biological databases. Emphasis will be given to the use of database information in biological research and to recent developments in genomics and proteomics. Offered: Every Winter Prerequisites: LSBIOC 341, LSBIOC 360, upper level undergraduate biochemistry or molecular genectics course, or permission of instructor.

591 Directed Individual Studies (1-6). Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor. Not to be identified with thesis research. Restricted to SBS graduate students and Interdisciplinary Ph.D. students.

592 Master of Arts Topics in Biology (1-6). Special problems and topics in biology specifically intended to satisfy the project or report requirement for the master of arts degree in biology. Enrollment is restricted to persons having satisfactorily completed at least nine hours of graduate work in Biology. Restricted to SBS graduate students.

593 Master of Science Topics (1-4). Investigation of problems and topics to satisfy the M.S. topics requirement for the master of science degree in Cellular and Molecular Biology. Restricted to SBS graduate students. Prerequisites: LSMBB 561 and LSMBB 562.

734 Cardiovascular Pulmonary Physiology (3). Function of the cardiovascular and pulmonary systems at the cellular, tissue, and system levels with particular emphasis on regulation, maintenancy of homeostasis and integration with other systems. Prerequisites: LSPHYS 316 or equivalent.

742 Neurobiology (3). Neurobiology will consist of the presentation of theory and data concerning cellular and molecular fundamentals of the nervous system, synaptic mechanisms, sensor-motor systems, and higher-order functions of the nervous system. Three hours of lecture per week. Prerequisite: LSBIOC 304

899 Required Graduate Enrollment (1).

Life Sciences Courses

899 Required Graduate Enrollment (1).

Life Sciences - Cell Biology and Biophysics Courses

505 Molecular and Cellular Neurobiology (3). The molecular basis of chemical and electrical communication between nerve cells. Topics will include: neurotransmitters, neuropeptides, receptors, channels, second messengers, cytoskeleton, cell adhesion, development, neuronal plasticity and psychopharmacology. Prerequisite or corequisite: LSMBB 561 and 562.

520 Eukaryotic Cell Biology (3). A presentation of the cellular and subcellular organization and function of eukaryotic cells. Discussions will emphasize basic concepts by which structure and functions are integrated. Prerequisite or co-requisite: LSMBB 561 and 562.

530 Prokaryotic Molecular Biology (3). Molecular aspects of gene structure and function in micro- organisms and their viruses. Emphasis on macromolecular synthesis, regulation of gene expression, genetic transfer and recombinant DNA techniques. Prerequisite or corequisite: LSMBB 561 and 562.

538 Molecular Recognition in Cellular Biology (2). Graduate Research Seminar. Studies of the latest development leading to an increased understanding of cellular biology processes when the experimental tools for structure biology analysis and molecular genetics are applied. Prerequisites: LSMBB 561 as co-or pre-requisite, or permission of SBS graduate advisor. Offered: Fall

566 Membrane Biochemistry and Biophysics (3). Structure and function of biological membranes including architecture, dynamics, models, biochemical compartmentation, energy transduction, transport mechanisms, membrane protein structures, and cell surface receptors. Prerequisite or corequisite: LSMBB 561 and 562.

569 Structural Biology, Methods and Strategies (3). Analysis of strategies and methodologies such as X-ray crystallography, nuclear magnetic resonance and advanced microscopy procedures including imaging analysis for the study of relationships of higher order macromolecular structures to biological functions. Prerequisites: LSMBB 561 AND LSMBB 562. Restrictions: Restricted to AU 60 and 73 students.

583 Current Topics in Cell Biology and Biophysics (1-3). Current topics and recent developments in cell biology and biophysics with emphasis on rapidly developing research areas. Prerequisite or co-requisite: LSMBB 561 and 562. Restricted to SBS graduate students and Interdisciplinary Ph.D. students.

591 Directed Individual Studies in Cell Biology and Biophysics (1-6). Intensive reading and/or research in an area selected by the graduate student in consultation with the instructor. Prerequisites: Prerequisite or corequisite: LSMBB 561 and 562. Restricted to SBS graduate students and Interdisciplinary Ph.D. students.

596 Advanced Experimental Cell Biology I (2). Structured laboratory work with individual tutorial sessions designed to familiarize first year Interdisciplinary Ph.D. students with concepts and techniques of modern cell biology research. 1-2 hr/wk tutorial and 15-20 hr/wk of laboratory work. Prerequisite or co-requisite: LSMBB 561. Restricted to Interdisciplinary Ph.D. students with CBB or MBB as coordinating unit.

597 Advanced Experimental Cell Biology II (2). Continuation of LSCBB 596. Prerequisite or corequisite: LSMBB 561 and 562. Restricted to Interdisciplinary Ph.D. students with CBB or MBB as coordinating unit.

599 Thesis Research in Cell Biology and Biophysics (1-12). Research and thesis preparation for M.S. degree candidates. Prerequisite or co-requisites: LSMBB 561 and 562. Restricted to School of Biological Sciences graduate students and Interdisciplinary Ph.D. students.

612 Seminar in Cell Biology and Biophysics (1). Presentation and discussion of selected areas in cell biology and biophysics. This course may be repeated by doctoral students for a maximum of 3 credit hours. Prerequisite or correquisite: LSMBB 561 and 562.

690 Analytical Methods in Cell Biology and Biophysics (1-4). A course that emphasizes the development of skills in experimental design, analytical methods and instrumentation as applied to problems of interest to modern cell biology and biophysics, and analysis of results. Can be repeated up to a maximum of eight hours total. Prerequisites: LSMBB 561+LSMBB 562; admission in I.Ph.D program with CBB as coordinating or co-discipline; can only be taken prior to reaching candidacy.

699 Dissertation Research in Cell Biology and Biophysics (1-12). Research and dissertation preparation for interdisciplinary Ph.D. degree students who have Cell Biology and Biophysics as a discipline. Prerequisite or corequisite: LSMBB 561 and 562. Restricted to SBS graduate students and Interdisciplinary Ph.D. students.

Life Sciences - Molecular Biology and Biochemistry Courses

503 Eukaryotic Molecular Biology (3). Molecular aspects of gene structure and function in eukaryotic organisms and their viruses. Emphasis on genome structure and organization, gene expression and regulation and the molecular basis of growth and development. Prerequisite or Co-requisite: LSMBB 561 and 562.

538 Molecular Recognition in Molecular Biology (2). Graduate Research Seminar. Analysis of the impact of most recent developments in molecular genetics and structural biology as related to fundamental molecular recognition events. Prerequisites: LSMBB 561 as co-or pre-requisite, or permission of SBS graduate advisor. Offered: Winter

561 General Biochemistry I (4). The first semester of a two-semester sequence in general biochemistry. This course will emphasize the structure of biological molecules, thermodynamics and kinetics of biological reactions, and selected aspects of energy metabolism and metabolic pathways. Prerequisite: CHEM 322R.

562 General Biochemistry II (4). The second semester of a two-semester sequence in general biochemistry. This course will emphasize selected aspects of the biochemistry of metabolism and macromolecular assemblies. The molecular basis of genetic and metabolic regulation will be discussed. Prerequisite: LSMBB 561.

565 Structure and Function of Proteins (3). This course will discuss structure-function relationships of proteins. Topics will include: methods of structure-function analysis, catalytic mechanisms, and regulation of enzyme activity. Prerequisite or corequisite: LSMBB 561 and 562.

567 Physical Biochemistry (3). Application of physical and chemical principles to elucidate structure and function of biochemical systems. The various modes of interactions between biologically important molecules and the specificity of their interaction will be examined through selected literature examples. Prerequisite or co-requisite: LS MBB 561 and 562.

569 Current Topics in Molecular Biology and Biochemistry (1-3). Current topics and recent developments in biochemistry and molecular biology with emphasis on rapidly developing research areas. Prerequisite or co-requisite: LSMBB 561 and 562. Restricted to SBS graduate students and Interdisciplinary Ph.D. students.

591 Directed Individual Studies in Molecular Biology and

Biochemistry (1-6). Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor. Prerequisite or co-requisite: LSMBB 561 and 562. Restricted to SBS graduate students and Interdisciplinary Ph.D. students.

596 Advanced Experimental Molecular Biology I (2). Structured laboratory work with individual tutorial sessions designed to familiarize first year Interdisciplinary Ph.D. students with concepts and techniques of modern molecular biology research. 1-2 hr/wk tutorial and 15-20 hr/wk of laboratory work. Prerequisite or co-requisite: LSMBB 561. Restricted to Interdisciplinary Ph.D. students with CBB or MBB as coordinating unit.

597 Advanced Experimental Molecular Biology II (2). Continuation of LSMBB 596. Prerequisite or co-requisite: LSMBB 561 and 562. Restricted to Interdisciplinary Ph.D. students with CBB or MBB as coordinating unit.

599 Thesis Research in Molecular Biology and Biochemistry (1-12). Research and thesis preparation for M.S. degree candidates. Prerequisite or co-requisite: LSMBB 561 and 562. Restricted to School of Biological Sciences graduate students and Interdisciplinary Ph.D. students. **611 Seminar in Molecular Biology and Biochemistry (1)**. Presentation and discussion of selected areas in biochemistry and molecular biology. This course may be repeated by doctoral students for a maximum of 3 credit hours. Prerequisite or co-requisite: LSMBB 561 and 562.

690 Analytical Methods in Molecular Biology and Biochemistry (1-4). A course that emphasizes the development of skills in experimental design, analytical methods and instrumentation as applied to problems of interest to modern molecular biology and biochemistry, and analysis of results. Can be repeated up to a maximum of eight hours total. Prerequisites: LSMBB 561+LSMBB 562; admission into I.Ph.D. program with MBB as coordination or co-discipline; can only be taken prior to reaching candidacy.

699 Dissertation Research in Molecular Biology and Biochemistry (1-12). Research and dissertation preparation for interdisciplinary Ph.D. program students who have Molecular Biology and Biochemistry as a discipline. Prerequisite or co-requisite: LSMBB 561 and 562. Restricted to SBS graduate and Interdisciplinary Ph.D. students.

Henry W. Bloch School of Business and Public Administration

5110 Cherry Street (816) 235-**2215** bloch@umkc.edu http://www.umkc.edu/bloch

Mailing Address

University of Missouri-Kansas City Henry W. Bloch School of Business and Public Administration 5100 Rockhill Road Kansas City, MO 64110-2499

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Introduction

Degree Programs

The Bloch School offers the degrees of bachelor of business administration, (B.B.A.), bachelor of science in accounting (B.S. in accounting), master of business administration (M.B.A.), master of public administration (M.P.A.) and the master of science in accounting (M.S. in accounting). The School has two joint degree programs with the UMKC School of Law, the J.D./M.B.A. and the J.D./M.P.A. degrees, and also participates in the Interdisciplinary Ph.D. program. Additionally, within the M.B.A. program there is an Executive M.B.A. offering. For those students who are enrolled in non-business undergraduate degree programs at UMKC, the Bloch School offers a business minor.

History

The University has offered business courses since 1933. In 1953, with the support and encouragement of the Kansas City community, the School of Business Administration was established. Since that time, the Bloch School has grown to a student body of 1100 and a faculty of approximately 45 professional educators. In January 1988, the School was renamed for Henry W. Bloch, co-founder of H&R Block, and moved into a newly expanded building.

Mission

The Henry W. Bloch School of Business and Public Administration supports the mission of the University of Missouri-Kansas City and provides high quality professional education for a changing world. The Bloch School offers undergraduate, graduate, executive and other outreach programs responsive to business and community needs. These programs are delivered through a curriculum combining a solid preparation in basic management functions with the skills of leadership, entrepreneurship, strategic decision-making and an understanding of the technological and global environment. The School's faculty is committed to teaching, scholarship and service, and to continuously improving a learning environment that brings discipline to the real-world challenges of management practice.

Accreditation

The Bloch School is accredited by AACSB International - The Association to Advance Collegiate Schools of Business, and by the National Association of Schools of Public Affairs and Administration.

Advising and Student Services

Staff in the Student Services Office, Room 115 of the Bloch School, assist students in applying for admission, planning programs and registering for courses. Graduate students must be advised prior to enrolling in their first semester. Additionally, students in the master of science in accounting program must be advised each semester. For more information, contact the Student Services Office at (816) 235-**2215**. Faculty of the School's four curricular departments are available to discuss students' programs and additionally, information can be found on the Bloch School Web site at http://www.umkc.edu/bloch.

Scholarships

The Bloch School offers numerous scholarships for students enrolled in Bloch degree programs. Information and applications are available in the Student Services Office, room 115, or on the Bloch School Web site. March 1 is the deadline for the majority of these scholarships, which are awarded for the following academic year. For information on loans, grants, and other financial aid, contact the Financial Aid and Scholarships Office.

Internships

An internship is recommended for students without prior work experience in their field. For-credit internships carry a minimum of one hour of credit and a maximum of six hours of credit, and may be used as elective credit in the M.B.A. program. For students in the M.P.A. program, internship credit is in addition to the 36-hour minimum degree requirement. Students should identify a Bloch School faculty member qualified and willing to supervise an internship and complete an independent study form available in the Student Services Office. All interested students should contact the UMKC Career Services Office for more details.

GRA/GTA Appointments

A limited number of graduate research assistant and graduate teaching assistant positions are available for masters-level students. Application materials are available in the Bloch School Student Services Office, room 115 of the Bloch School and at http://www.bloch.umkc.edu/syllabi/research/gtagra.htm. Completed applications are placed on file in the Student Services Office and made available for faculty review.

International Study Abroad

Bloch School graduate students have the opportunity to study abroad for credit. Students may study for a semester, an academic year or in a special summer program at business schools in Europe. The Bloch School maintains bilateral exchange agreements with business schools in the United Kingdom, France, Germany and Spain. Students who are interested in study abroad opportunities should contact the Bloch School Student Services Office or the UMKC Office of International Academic Programs.

Student Organizations

Beta Alpha Psi

UMKC's Epsilon Delta Chapter of Beta Alpha Psi, the national scholastic and professional accounting fraternity, provides opportunities for self-development and association among student members, practicing accountants and accounting faculty. Activities include technical programs presented by members and professionals, tutoring, taxpayer assistance, field trips and social events.

Bloch School Student Association

The Bloch School Student Association (BSSA) elects a board of directors to represent the student body on various campus and school administrative committees, and sponsors a number of activities and events.

Collegiate Entrepreneurs Organization

CEO is the premier national network of college students who are seriously interested in entrepreneurship. The UMKC chapter's mission is to inform, support, and inspire college students to be entrepreneurial and seek opportunity through enterprise creation.

Delta Sigma Pi

Delta Sigma Pi, the nation's largest professional business fraternity, is open to students interested in all fields of business. Through professional speakers and seminars, developmental workshops, and interactive social events with business leaders, faculty members and prominent alumni, the fraternity provides students an excellent opportunity to explore the business environment while still concentrating on academics.

Financial Management Association

The Financial Management Association serves as a medium for students to become acquainted with finance practitioners and their activities, what industry expects from new graduates and how students can best prepare themselves to become successful professionals in today's job market.

IMA Student Chapter

The Institute of Management Accountants Student Affiliate Group conducts its professional programs in cooperation with the Kansas City chapter of the Institute of Management Accountants. Student members are eligible for participation in the activities of the UMKC student chapter, the Kansas City professional chapter and the international organization.

Students in Free Enterprise

SIFE is an international nonprofit organization with teams at more than 700 colleges and universities around the world. The group is characterized by faculty encouraging students, students energizing business leaders, business leaders helping faculty, and everyone working together to teach the principles of free enterprise. Student teams develop and implement business/commerce related projects for the community and compete with other teams across the country for prizes.

Honor Societies

Beta Gamma Sigma is a national society for students in business administration, including students, faculty, members of the administrative staff, alumni and honorary members. Membership is by election from graduate students in the upper 20 percent of their graduating class, with a grade-point average of at least 3.5, and seniors.

Pi Alpha Alpha is a national honor society that recognizes and honors students with high academic achievement in public administration. Students who have a grade-point average of at least 3.7 for a minimum of 18 semester hours toward the M.P.A. are eligible for membership. Invitations are extended to qualified students each spring.

Special Programs and Centers

Center for International Business

Henry W. Bloch School of Business and Public Administration 5110 Cherry Street (816) 235-**5259** http://www.umkc.edu/international

The Center for International Business at the Bloch School promotes and supports academic study and research in international business. The objectives of the center include: (1) developing and maintaining international course offerings which support the curricula for the BBA, MBA, and the EMBA programs; (2) promoting and supporting Bloch School faculty and student involvement in academic exchange programs with international partner business schools throughout the world; (3) maintaining the International Business Information Research Directory (IBIRD) with Web site links to important country and subject information sources; and (4) engaging in liaison and outreach activities with UMKC and Kansas City organizations involved in international activities.

Entrepreneurial Growth Resource Center

Henry W. Bloch School of Business and Public Administration 4747 Troost Avenue (816) 235-**5417** http://www.umkc.edu/egrc

The mission of the Entrepreneurial Growth Resource Center is to provide students with experiential learning opportunities and involvement in forums that challenge their academic and business experience. Students provide professional consulting and research for starting new ventures, as well as for established small-business firms in the Kansas City area. This experience serves to bond the University with its community while enhancing student competence through practical application of academic principles.

KCSourceLink

Henry W. Bloch School of Business and Public Administration 4747 Troost Avenue (816) 235-**6500** http://kcsourcelink.org

KCSourceLink's mission is to help small businesses in the Kansas City region - from Jefferson City to Topeka - grow and succeed. KCSourceLink connects a network of hundreds of resource providers in the Kansas City region that offer business-building products and services for small businesses. KCSourceLink facilitates the linking of these resource partners to one another and to the small and emerging business owner.

Midwest Center for Nonprofit Leadership

Henry W. Bloch School of Business and Public Administration 5110 Cherry Street (816) 235-**2305** http://www.umkc.edu/mcnl

The Midwest Center for Nonprofit Leadership is the Bloch School's education and outreach center dedicated to building the capacity of nonprofit public service organizations in the Midwest. The center's mission is to enhance the performance and effectiveness of nonprofit organizations and their leaders through high quality community-oriented education, research, and facilitation services. Center faculty, fellows and students support nonprofit organizations as educators, advisers and facilitators in areas such as governing board development, management development, strategic planning, strategic organizational and financial management, and the leadership of major change initiatives. The center also operates a Nonprofit Resource Center that is open to students and all members of the community.

UMKC Small Business Development Center

Henry W. Bloch School of Business and Public Administration 4747 Troost Avenue (816) 235-**6063** http://www.bloch.umkc.edu/sbdc

The Missouri Small Business Development Centers, a partner with the University of Missouri Outreach & Extension Business Development Programs, educates individuals to successfully start, run and grow small and entrepreneurial businesses that build a viable economic base, improve lives and enhance communities. The SBDC delivers quality services in a timely fashion, communicates the program systematically and delivers programs and information based on unbiased research and facts. In Kansas City, the SBDC is part of the UMKC Bloch School of Business and Public Administration and helps both established businesses and those that are just beginning.

Graduate Programs

Admission Requirements

Admission is based on evaluation of qualifications. Applicants to the M.B.A. and M.S. in accounting programs are considered for admission based on their scores on the Graduate Management Admission Test (GMAT), undergraduate grade-point averages and other criteria established by the faculty. Applicants to the Executive M.B.A. (E.M.B.A.) program are considered for admission based on increasingly responsible professional and/or managerial experience, undergraduate grade-point average, employer recommendation and other criteria as established by the faculty. A GMAT score is recommended but not required for E.M.B.A. students. Applicants to the M.P.A. program are considered for admission on the basis of undergraduate grade-point average and Graduate Record Examination (GRE) scores (verbal and quantitative sections).

The emphases in health services administration and early childhood leadership in the M.P.A. program have additional admission requirements. Application materials describing these requirements can be obtained from the Student Services Office, Bloch School, Room 115, (816) 235-2215.

Most classes are offered on weekday evenings. Selected courses may be offered in an intensive weekend format.

Retention and Graduation Requirements for Graduate Students

Students enrolled in the M.B.A. (including the Executive M.B.A. program), M.P.A. or M.S. in accounting programs must maintain a minimum 3.0 grade-point average (GPA) in all courses for which graduate credit is given. Students with GPAs that fall below the minimum 3.0 requirement are placed on probation and are allowed two successive semesters (including the summer semester, if enrolled) to restore their GPAs to the required 3.0 level.

Students must file an application for graduation by the announced campus deadline during the student's last semester in the program (students are encouraged to submit this application earlier if possible). This application must be filed in order to obtain the degree. Applications are available in the Bloch School Student Services Office. M.S. in accounting students may be required to take additional 400-level courses to meet program requirements. M.S. in accounting students must have a minimum of 24 hours of 500-level coursework.

No course with a grade below B- (2.7), in any 300- or 400-level course, or below C (2.0) in any 500-level course or above, will count toward any advanced degree program; however, the grade will be included in calculation of the student's GPA. Eighty percent of the credits for the degree must be passed with a grade of B (3.0) or better.

An official program of study must be filed with the Bloch School Student Services Office once an emphasis area has been declared. This form constitutes a contract and must be signed by the student, faculty adviser and department chair. Any changes to the program must be approved on a change of program form by the same three individuals.

Students are responsible for ensuring their course of study falls within the program guidelines. Students should contact the Bloch School Student Services Office for any updates to policies and program requirements. Updates to the programs can also be found on the Bloch School Web site at umkc.edu/bloch.

Thesis

A thesis is not required, but may be desirable for any student with future interest in pursuing a doctoral degree. Any student wishing to prepare a thesis should consult a faculty adviser. Students may obtain a maximum of six hours of credit.

Transfer Credit

Students may transfer up to 20 percent of the graduate credit hours required for their program (for the M.B.A., this applies only to courses beyond the core and is limited to 6 hours). Coursework must be from an accredited institution, with a grade of B or better, and appropriate to the student's program. Also, the coursework must have been completed within seven years of completion of all requirements for the degree. Evaluation of transfer credit is done by faculty and requires documentation provided by the student.

Independent Study

Students are limited to a total of nine hours of BMA 591, BA 597, BMA 597, HA 586, PA 563, PA 572, PA 593, PA 598, and/or ACTG 597, to include no more than six hours of independent study and no more than three hours of any one practicum, including the small business practicum. Interested students should consult with an adviser in the Bloch School Student Services Office.

Master of Business Administration

The Bloch School offers a master of business administration (M.B.A.) and an executive master of business administration (E.M.B.A.). Students enrolling in the M.B.A. program are required to choose among seven emphasis areas, and their programs will consist of between 30 and 48 credit hours. Most M.B.A. students attend evening courses on a part-time basis. E.M.B.A. students enter a cohort-based, lockstep program that offers only the general management emphasis. This program is taken in a full-time, weekend schedule (alternating Fridays and Saturdays).

The M.B.A.'s general administration courses stress the knowledge and skills needed to deal with an organization and its personnel. The functional courses (accounting, finance, production, economics and marketing, etc.) develop specialized knowledge and skills. In addition, the M.B.A. program stresses leadership and the related social and public responsibilities for those in business.

The Curriculum

The M.B.A. degree requires a minimum of 30 hours and a maximum of 48 hours, depending upon the student's educational background. Of the total 30-48 hours, 18 hours beyond the core must be outside the student's area of specialization (emphasis).

Students may pursue the M.B.A. program full-time or part-time. Students who have completed the Bloch School B.B.A. or B.S. in accounting programs with C or better grades in required courses, and who have met M.B.A. admissions standards, may enter directly into the courses beyond the core of the M.B.A. program and complete the degree requirements with 30 hours of coursework. Additionally, students who have completed an undergraduate business degree from an AACSB-accredited institution and have met the MBA admissions standards, are waived from the core with a grade of C or better in the equivalent undergraduate courses.

Students with prior coursework in business (C or better grades) may be exempted from up to 18 credit hours of the 48 required for the degree. Waivers and exemptions are determined based on documentation provided by the student.

Previous college work in business is not required, but students with no preparation in mathematics and computer applications must complete Math 110 and BIS 202.

1. Core Courses: 24 Hours

- ACTG 517 Survey of Accounting
- BA 501 Economics for Administration
- BA 519 Operations Management
- BA 531 Marketing
- BA 532 Financial Management
- BDS 508 Statistical Methods for Administrative Decisions
- BMA 505 Organizational Behavior
- BMA 510 Legal and International Business Environment (satisfies AACSB ethics requirement)

2. Beyond Core Courses: 24-30 Hours

The minimum of 30 credit hours must be completed for the M.B.A. degree, with additional hours possibly required based on educational background. The following must be completed:

- BMA 537 Competitive Strategies
- Emphasis Area (12 hours)
- Electives (9-15 hours outside of emphasis)

M.B.A. Emphasis Areas

The M.B.A. program offers advanced study in seven emphasis areas: entrepreneurship, finance, general management, leadership and change in human systems, management of information systems, marketing and operations management. Each emphasis area is comprised of 12 hours.

Students can, with consent of appropriate faculty, select any other courses that might fit within the emphases listed below. Students are strongly encouraged to work closely with an adviser in planning their programs so that the courses they choose will be of interest and benefit to them while fulfilling the requirements of the degree. Emphasis areas follow.

Entrepreneurship Emphasis (12 hours)

Four courses selected from the following:

- BMA 525 Entrepreneurship: Managing Creativity and Innovation
- BMA 535 Small Business Management and Entrepreneurship
- BMA 541 Personal Entrepreneurial Strategy
- BMA 542 Technology & New Ventures I
- BMA 543 Technology & New Ventures II
- BMA 545 Entrepreneurship and New Venture Creation

- BMA 585 Venture Capital Finance and Investment
- BMA 587 Seminar in Entrepreneurship
- BMA 591 Small Business Management Practicum
- BMA 597 Independent Research in Entrepreneurship
- Any other course approved by Entrepreneurship faculty.

Finance Emphasis (12 hours)

 BA 550 Advanced Financial Management Theory and Policies

Plus nine hours selected from the following:

- BA 551 International Financial Management
- BA 552 Financial Markets and Institutions
- BA 553 Investment Analysis
- BA 556 Management of Financial Intermediaries
- BA 557 Derivative Securities
- BA 558 Risk Management and Insurance
- BA 559 Strategic Financial Management
- BA 580 Seminar in Finance

General Management Emphasis (12 hours)

Select one course from four of the following course areas: Leadership and Change in Human Systems, Law and Society, Strategy and Planning, International Business, or Entrepreneurship (a list of courses in each area is available in the Bloch School Student Services Office).

Leadership & Change in Human Systems Emphasis (12 hours)

Four courses selected from the following:

- BMA 516 Leading Teams
- BMA 533 Leadership and Change in Organizations
- BMA 560 Strategic Human Resources
- BMA 566 Strategic Staffing
- BMA 567 Total Rewards Management
- BMA 583 Leading With Integrity

Management of Information Systems Emphasis (12 hours) Four courses selected from the following:

- ACTG 567 Information Systems Control and Audit
- ACTG 569 Information Systems Consulting
- BDS 528 Decision Support and Expert Systems
- BIS 552 Data Base Management
- BIS 554 Systems Analysis, Design and Engineering
- BIS 556 Distributed Information Technology
- BIS 558 Management and Economics of Computing
- BIS 580 Seminar in Information Systems

Additional elective courses may be selected from the following:

- BA 542 ERP Enterprise Resource Planning Systems
- BA 543 Project Management
- BA 544 ERP Supply Chain and Logistics Management
- BDS 530 Introduction to Management Science
- BDS 545 Forecasting Theory and Applications
- BDS 546 Management Science II

Marketing Emphasis (12 hours)

• BA 575 Advanced Marketing Strategy

Plus nine hours selected from the following:

- BA 539 Management in Direct Marketing
- BA 560 Buyer Behavior
- BA 561 Promotional Strategies in Marketing
- BA 562 Marketing Research
- BA 563 Direct Marketing Theory
- BMA 555 International Marketing

Additional elective courses may be selected from the following:

- BIS 552 Data Base Management
- BDS 545 Forecasting Theory and Applications
- ECON 525 Econometric Methods

Students may confer with a faculty member to select courses that concentrate in Marketing Research and Analysis, Direct Marketing, or other fields; students with an interest in Direct Marketing should complete the following courses: BA 539, BA 563, and BIS 552. These are not, however, separate emphasis areas.

Operations Management Emphasis (12 hours) Required nine hours:

- BA 542 ERP Enterprise Resource Planning Systems
- BA 543 Project Management
- BA 544 ERP Supply Chain and Logistics Management

Select one of the following:

- BA 540 Service Operations Management
- BA 541 Total Quality Management
- BA 547 Contemporary Issues in Operations Management

Normally, two or more electives should be selected from the following:

- BDS 530 Introduction to Management Science
- BDS 545 Forecasting Theory and Applications
- ACTG 556 Cost Management
- BIS 502 Management of Information Systems

Note: Students should ensure that prerequisites are taken in the proper sequence. Prerequisites and program requirements may change. Contact the Student Services Office for current information.

Executive M.B.A. Program

The Executive Master of Business Administration program (E.M.B.A.) provides an intensive learning environment in which experienced professionals can develop the business knowledge and leadership skills required to excel as executives, entrepreneurs, and leaders in business and the community. The program achieves this objective through a comprehensive, integrated curriculum; field experiences; and residencies, including a capstone international experience. It is distinguished by an emphasis on teamwork, hands-on projects, and learning activities that contribute value to employers and the larger community.

The program is taught in integrated, semester-long modules covering M.B.A. coursework in finance, information technology, accounting, management, leadership, marketing, operations, entrepreneurship, strategy and international business. A learning residency in Washington, D.C., enhances students' understanding of how business and governments interact. An international residency allows students to apply previous learning in finance, accounting and other business areas in a practical, international context. Projects related to both private and public sectors increase awareness of the importance of the interplay between the for-profit and nonprofit environments. The curriculum is outlined below:

- Module I, Fall: Tools for Competitive Analysis
- Module II, Winter/Spring: Managing People and Systems, and the Washington Residency Summer: Public Sector in Business Projects
- Module III, Fall: The Enterprise and Its Environment
- Module IV, Winter/Spring: Strategic Leadership and International Residency

Students enter the program in a cohort group that continues through the two-year program. The advantages of a cohort experience are enhanced by multiple team-based assignments. Daylong sessions are held on Fridays and Saturdays in alternating weeks during regular semesters. Some summer work is required.

Applicants should possess an undergraduate degree and a minimum of five years of increasingly responsible professional, managerial or entrepreneurial experience and a career history of success and strong management potential. For further information, contact the Executive M.B.A. program, (816) 235-**5773**.

Entrepreneurship Partnership Program

The Bloch School is a partner with the University of Kansas and Rockhurst University in offering an expanded entrepreneurship curriculum. For more information about courses and schedules, refer to one of the following Web sites http://www.Entrepreneurialeffect.org or http://www.umkc.edu/egrc or http://www.umkc.edu/egrc

Combined J.D./M.B.A. Program

The Bloch School and UMKC School of Law offer the combined J.D. and M.B.A. program. Students must satisfy the admission and degree requirements for each school. For further information, contact the School of Law or the Bloch School Student Services Office.

Master of Public Administration

Public administration encompasses challenging careers in a wide variety of settings, including local, state and national governments, private nonprofit organizations, many health service organizations as well as in international agencies and public affairs units of businesses. These organizations require administrators and analysts who can effectively manage in complex public organizational settings.

The master of public administration degree program offered through the L.P. Cookingham Institute of Public Affairs prepares students for these careers and for leadership roles in public service. The program's core curriculum provides students with a broad perspective on the environment, techniques and problems of public, health and nonprofit management. The program's emphasis areas permit development of specialized knowledge in subfields, including early childhood leadership, gerontology administration, health services administration, human resources, information operations, nonprofit management, organizational behavior and urban administration. Together, the core curriculum and courses in an emphasis area help students enhance their knowledge and skills in managing and leading in public organizations.

The Curriculum

The M.P.A. degree will be awarded on completion of 36 semester hours, consisting of 21 hours of required core courses, 9 to 15 hours in a selected emphasis area and up to 6 hours of electives. An internship is recommended for any student without substantial prior work experience in public, nonprofit or health administration. Individual courses may be waived if a student presents evidence of adequate undergraduate study, but other courses for graduate credit must be substituted to meet the minimum of 36 hours.

Core Curriculum - Required Courses (21 Hours)

- PA 510 Research Methods in Public Administration
- PA 526 The Politics of Administration
- PA 548 Leadership for Public Service
- BMA 513 Economic Policy and Managerial Control *or* BA 501 Economics for Administration
- PA 525 Financial Accountability and Policy Development

- PA 544 Program Evaluation & Analysis
- PA 530 Public Management

Students selecting the health services administration emphasis may replace BMA 513 with HA 571, Financial Management Issues in Health and Human Services Organizations. Students may also replace PA 544 with HA 578, The Evaluation and Control of Health Services. If HA 571 and HA 578 are used to satisfy core requirements, they cannot count toward the 9-hour minimum for the health services administration emphasis.

Electives (Up to 6 hours)

Elective courses may be selected from political science, economics, psychology, sociology, as well as from other graduate fields with approval of the faculty adviser.

M.P.A. Emphasis Areas

Students seeking the master of public administration degree specialize in one of several areas:

Early Childhood Leadership (15 hours)

- EDCI 576 Administration of Early Childhood Programs
- EDCI 582 Program Models in Early Childhood Education
- PA 556 Innovation in Nonprofit Management and Leadership

Two courses selected from the following:

- PA 553 Legal Framework & Financial Management of NPO's
- PA 551 Strategic Management in Nonprofit Organizations
- EDRP 510 Child Behavior and Development

Gerontology Administration

Required hours will be arranged with students. Interested students also should consult with the Center on Aging Studies at (816) 235-1747.

Health Services Administration (9 hours)

- HA 465 Contemporary Issues in Urban Public Health
- HA 571 Financial Management Issues in Health and Human Services Organizations
- HA 575 Long-Term Care Policy and Administration
- HA 576 Managed Care Institutions
- HA 577 Health Service Administration and the Health Professions
- HA 578 The Evaluation and Control of Health Services
- HA 585 Seminar in Health Services Administration
 HA 586 Supervised Research in Health Services
- Administration PA 593 Internship Seminar
- PA 593 Internship Seminar

Human Resources (9 hours)

Select three of the following courses:

- BMA 560 Strategic Human Resources
- BMA 566 Strategic Staffing
- BMA 567 Total Rewards Management
- PA 570 Diversity in the Workplace

Information Operations (9 hours)

- BIS 552 Database Management
- BIS 554 Systems Analysis, Design and Engineering
- BIS 556 Distributed Information Technology
- BIS 558 Management & Economics of Computing
- BIS 580 Seminar in Information Systems
- BDS 528 Decision Support and Expert Systems
- ACTG 569 Information Systems Consulting
- Any approved Computer Science course which counts for graduate credit.

Nonprofit Management (12 hours)

- PA 455 Nonprofit Leadership Issues
- PA 495 Voluntarism, Philanthropy and the Nonprofit Sector in the United States
- PA 551 Strategic Management in Nonprofit Organizations
- PA 553 Legal Framework and Financial Management in Nonprofit Organizations
- PA 555 Topics in Nonprofit Fundraising
- PA 556 Innovation in Nonprofit Management and Leadership
- HA 571 Financial Management Issues in Health and Human Services Organizations

Organizational Behavior (12 hours)

The following four courses are required:

- PA 548 Leadership for Public Service *or* BMA 505 Organizational Behavior
- BMA 516 Leading Teams
- BMA 533 Leadership and Change in Organizations
- BMA 583 Leading with Integrity

Urban Administration (9 hours) Required:

• PA 535 Urban Policy and Administration

Two courses selected from the following:

- PA 536 Managing Urban Economic Development
- PA 539 Urban and Regional Planning for Urban Administrators
- PA 581 Seminar in Urban Administration
- PA 598C Supervised Research: Urban Administration

Other Emphasis Areas

A student may tailor a special program to individual talents, needs or job requirements. Such a program must be developed in consultation with a faculty adviser.

Note: Students should ensure that prerequisites are taken in the proper sequence. Prerequisites and program requirements may change. Contact the Student Services Office for current information.

The B.A. (Urban Affairs)/M.P.A. Program

Students obtaining a B.A. in urban affairs in the College of Arts and Sciences may pursue early admission to the master's degree program in public administration and obtain a master's degree in one additional year. The program allows students to utilize some of the M.P.A. courses to satisfy urban affairs requirements, thereby reducing the number of courses needed to complete both degrees. Students interested in this option should contact Professor Robyne Turner in the Department of Public Administration of the Bloch School or Professor Philip Olson in the Department of Sociology of the College of Arts and Sciences.

The B.B.A./M.P.A. Program

Students completing the bachelor of business administration may complete their M.P.A. degree in one additional year (three semesters) if they meet entrance requirements for the public administration graduate program. For more information about this option, contact the Bloch School Student Services Office.

Combined J.D./M.P.A. Program

The Bloch School and the UMKC School of Law offer a combined J.D. and M.P.A. program. Students must satisfy the admission and degree requirements for each school. For further information, contact the School of Law or the Bloch School Student Services Office.

Master of Science in Accounting

Advances in technology and organizational sophistication – in corporations, not-for-profit organizations, government and public accounting – are causing dynamic changes in the accounting profession. Such developments require that the educational experience of the accountant be expanded.

Unified Five-Year Program

The approach of the Department of Accountancy to these expanded educational needs is a unified five-year program of study, leading to the bachelor of science in accounting and the master of science in accounting degrees. Students may pursue advanced study in accounting/audit, taxation, accounting information systems and the management of financial resources. The program is designed with flexibility to allow students the following options:

- Completion of the entire five years at UMKC;
- Entry into the program as an undergraduate transfer student;
- Entry into the program at the graduate level with completion of an undergraduate degree at another university.

Note: Full admission to the graduate program is available to applicants with accounting or non-accounting backgrounds.

The Curriculum

The master of science in accounting program encompasses advanced analysis in a variety of areas. The total hours required are dependent on the focus of the student's undergraduate coursework. Students may be exempted from certain course requirements based on prior business and accounting coursework and grades earned, with exemptions determined at the time of initial advising and enrollment. Students with no preparation in mathematics and computer applications will be required to enroll in MATH 110 and BIS 202.

M.S. in Accounting – Non-accounting Undergraduates

This program is designed for students with little or no undergraduate accounting coursework. It provides comprehensive coverage of accounting topics necessary for a professional career in the field. Completion of the program also qualifies students for the various examinations leading to professional certification. Students with a bachelor of business administration degree from UMKC, or equivalent, may qualify for a 36-hour program. This program is outlined below.

Stage One

- ACTG 350 Accounting Systems & Controls
- ACTG 517 Survey of Accounting
- BA 501 Economics for Administration
- BA 519 Operations Management
- BA 531 Marketing
- BA 532 Financial Management
- BDS 508 Statistical Methods for Administrative Decisions
- BMA 505 Organizational Behavior
- BMA 510 Legal and International Managerial Environment or BMA 508 Law of Business Associations

Stage Two

- ACTG 307 or ACTG 556 Cost Management
- ACTG 310 Interm. Acct I or ACTG 558 Fin. Acct. Theory
- ACTG 311 Intermediate Accounting II
- ACTG 405 or ACTG 560 Introduction to Auditing

- ACTG 420 Advanced Accounting
- ACTG 421 Governmental/Not-for-Profit Accounting
- ACTG 557 Introduction to Income Taxation
- ACTG 575 Managerial Accounting: Issues, Tools and Analysis
- ACTG 576 Tax Research, Procedure and Practice
- ACTG 577 Advanced Auditing
- ACTG 562, ACTG 578, ACTG 579 (Select two of these three courses)
- BMA 537 Competitive Strategies (if not waived) or approved accounting, business or economics elective

Focus Areas

Students with an undergraduate degree in accounting may complete the M.S. in accounting program in a minimum of 30 semester hours. Students choose a focus in one of the following areas: accounting/audit, taxation, accounting information systems or the management of financial resources.

Accounting/Audit Focus (30 hours)

	Hours
ACTG 567, 575, 576, 577, 578 and 579	18
BMA 537 (if not waived)	3
Advanced finance elective	3
Electives selected from accounting,	
business or economics	6

Taxation Focus (30 hours)

	Hours
ACTG 571, 572, 573, 574, 576	15
BMA 537 (if not waived)	3
Electives selected from accounting,	
business or law	12

Accounting Information Systems Focus (30 hours)

	Hours
ACTG 565, 567, 569	9
BIS 552, 554	6
BMA 537 (if not waived)	3
Advanced accounting electives	6
Electives selected from accounting,	
business or computer science	6

Management of Financial Resources Focus (30 hours)

	Hours
ACTG 562, 575	6
BDS 528	3
BMA 537 (if not waived)	3
Finance courses:	
BA 550, 553, 580	9
Advanced accounting electives, one of which	
must be selected from the following:	
ACTG 572, 574, 576	9

Note: Students should ensure that prerequisites are taken in the proper sequence. Prerequisites and program requirements may change. Contact the Student Services Office for current information.

Doctor of Philosophy

Through the Department of Public Administration, the Bloch School participates in the Interdisciplinary Ph.D. program. Information about discipline-specific admission and program requirements may be found in the School of Graduate Studies section of this catalog. Those interested in doctoral study also may wish to contact the coordinator of doctoral studies for the Bloch School, Dr. Nicholas Peroff, at (816) 235-**2341**.

Accounting Courses

517 Survey of Accounting (3). An overview of financial and managerial accounting. The course introduces the various reports that are used by stockholders, creditors, and managers to assess company performance and

evaluate financial health. In addition, techniques are presented that assist firm managers in planning, control, and decision-making activities.

556 Cost Management (3). A study of the principles and techniques of cost accounting with emphasis on the structure of cost accounting systems and the processing, summarizing, and reporting of cost information. Topics include various issues relevant for manufacturing and service organizations, and introduction of situations that requires the application of cost information to managerial settings. Prerequisite: ACTG 517 or equivalent. NOT open to students who have completed ACTG 307 or equivalent.

557 Introduction to Income Taxation (3). An investigation of the structure of federal, state, and local taxation, along with an examination of the impact of taxes on the management decision process. Prerequisite: ACTG 517 or equivalent. NOT open to students who have completed ACTG 408 or equivalent.

558 Financial Accounting Theory (3). A study of the theory and practice of financial accounting with emphasis upon financial statement preparation and analysis of asset, liability, and equity measurement. Prerequisite: ACTG 517 or equivalent. NOT open to students who have completed ACTG 310 or equivalent.

560 Introduction to Auditing and Accounting Systems (3). Fundamentals underlying the design of accounting systems and the processing of accounting data. Current auditing standards and procedures are extensively investigated, withemphasis on the nature of internal control, audit evidence, and audit reports. Prerequisites: ACTG 350 & ACTG 558. Not open to students who have completed ACTG 405 or equivalent.

561 Personal Financial Planning (3). A study of the personal financial planning process and environment, with the goal of training participants to prepare integrated financial plans. Topics addressed include an overview of insurance, retirement, investments, debt management, tax issues, estate planning and professional ethics. Prerequisite: ACTG 517 or equivalent.

562 Financial Statement Analysis (3). A look at financial statements prepared by corporations for external use. The course provides students with the ability to organize, summarize, and understand corporate financial data for use in decision making. The subject matter should be especially useful for students considering careers in accounting, finance and financial services, and law. Prerequisite: ACTG 517 or equivalent.

565 Advanced Accounting Systems (3). An in-depth analysis of various contemporary issues in accounting information systems. Prerequisite: ACTG 350 or its equivalent or permission of instructor.

567 Information Systems Control And Audit (3). A study of the theory and practices employed to provide a secure computing environment. Potential threats to information systems as well as controls designed to counter those threats are emphasized. Prerequisite: One previous graduate course in accounting systems, management information systems, or computer science, or permission of the instructor.

569 Information Systems Consulting (3). An application of systems concepts to the evaluation of information systems of local organizations. Student teams will analyze, document and make recommendations for the improvement of these systems, and will communicate their findings via written reports and oral presentations. Prerequisite: One graduate information systems course or permission of instructor.

571 Individual Tax Problems (3). A study of substantive issues relating to individual taxation using the Internal Revenue Code and Regulations as sources. Topics include a detailed study of current issues such as alternative minimum tax, passive losses, and employee business expenses. Prerequisite: ACTG 409 or ACTG 557 or concurrent enrollment in ACTG 409.

572 Tax Theory and Business Applications (3). A study of substantive issues relating to the taxation of business entities including multi-jurisdictional considerations. Topics include business formation and dissolution, business valuation, selection of business entity, compensation of employees, sales or exchanges of business property, and business tax credits. Prerequisite: ACTG 409 or ACTG 557 or concurrent enrollment in ACTG 409.

573 Taxation of Estates, Gifts, and Trusts (3). A study of substantive issues in the income taxation of estates and trusts and the taxation of estates and gifts using the Internal Revenue Code and Regulations as sources. Emphasis will be placed on lifetime and post-mortem planning techniques as well as compliance requirements. Prerequisite: ACTG 409 or ACTG 557 or concurrent enrollment in ACTG 409.

574 Tax Accounting (3). A study of substantive issues relating to the accounting aspects of federal income taxation. Topics include methods of income and expense reporting, adoption of and change in accounting periods and methods, and annual accounting and transactional concepts. Prerequisite: ACTG 409 or ACTG 557 or concurrent enrollment in ACTG 409.

575 Managerial Accounting: Issues, Tools and Analysis (3). A look at various tools used to assist in the planning, control, performance evaluation, and decision-making activities of managers. Contemporary issues that

confront management are introduced where appropriate. Prerequisite: ACTG 307 or ACTG 556 or equivalent.

576 Tax Research, Procedure and Practice (3). An introduction to research sources and methods with an emphasis on analysis and communication of conclusions. Administrative procedures of the Internal Revenue Service and the professional responsibilities of tax practitioners will also be addressed. Prerequisite: ACTG 409 or ACTG 557 or concurrent enrollment in ACTG 409.

577 Advanced Auditing (3). An analysis of real-world cases of audit problems with emphasis on red flags, pressures auditors face, and serious implications of audit failure (both perceived and real) Prerequisite: ACTG 405 or equivalent

578 Current Problems in Accounting (3). This course will focus on an in-depth exploration of specific problems including, but not confined to those accounting problems which have resulted in official positions being published or considered by the accounting profession. Prerequisite: ACTG 420 or equivalent or concurrent enrollment in ACTG 420.

579 Theory of Income Determination (3). This course will consider the historical and cultural development of accounting principles and the relationship of those principles to economic concepts of profit and cost. Consideration of the economic aspects of accounting measurements will provide a vehicle for exploring accounting problem areas in terms of both internal and external reporting needs. Pertinent literature in the field will be explored as a basis for both oral and written reports. Prerequisites: ACTG 420 or equivalent, or concurrent enrollment in ACTG 420.

597 Special Topics in Accounting (1-3). Study and research in areas of special interest under individual faculty direction. Areas are: (A) Financial Accounting; (B) Cost/Managerial Accounting; (C) Taxation; (D) Auditing; (E) Accounting Systems; (F) Other Topics. Students may complete a maximum of six hours of Accounting 597. Prerequisite: Preregistration consent of instructor.

Business Administration Courses

501 Economics for Administration (3). This course is designed for graduate students in the School of Business and Public Administration. Topics include the theory and determination of national income, fiscal policy, monetary theory and policy, production and cost theory, and market structure.

503 Economic Analysis for Management (3). A study of relationships between economic theory and management of the firm in a market economy. Demand, revenue, and cost interrelationships are examined in the context of various market structures encountered in the American economy. The theoretical framework developed is used further to analyze economic problems involving the firm and the public interest. Prerequisites: BA 501, BDS 530.

519 Operations Management (3). An integrating study focusing upon the models and methods of production and operations management. Managerial approaches to planning, scheduling, and controlling both product and service cost, quality, production, inventory, and distribution are studied. While both quantitative and qualitative models are studied, an emphasis is given to quantitative methods of planning and controlling the operations function of organizations. Prerequisites: BDS 508, ACTG 517 or Equivalents.

531 Marketing (3). The convergence of traditional and direct marketing into integrated relationship marketing, incorporating the new arena of electronic technology is the focus of this course. The emphasis is on the interface between an organizations' objectives, capabilities, resources and marketplace needs and opportunities; this is applied to all organizations, including those that produce products or services, and profit and non-profit organizations.

532 Financial Management (3). An introduction to the role of financial management through the development of a conceptual framework appropriate for financial decision making. Generally, financial management is charged with the responsibility for obtaining and effectively utilizing the funds necessary for the operation of an enterprise. As such, the conceptual framework includes elements of financial planning (financial analysis, cash budgeting and profit planning), capital budgeting (rate of return and cost of capital), and basic considerations of alternative sources of funds. Prerequisites: ACTG 517, BDS 508, BA 501.

539 Management in Direct Marketing (3). The organization , planning and control of direct marketing efforts as an integral part of an institution's total marketing program. A synthesis of direct marketing efforts with the institution's other major functional areas in order to achieve efficiently overall organizational objectives. Prerequisite: BA 531.

540 Service Operations Management (3). This course focuses on the increasing importance and role of service in our economy. Topics studied are: the role of services in an economy, the nature of services, service strategy, the service delivery system, service facility location, the service encounter, service quality, productivity and quality improvement. Methods of process analysis in service organizations, methods improvement procedures, and work measurement techniques are developed to provide the basis for analyses of processes, layouts, and job design in a service organization. Prerequisites: BA 519 or BA 426 or consent of the instructor.

541 Total Quality Management (3). An in-depth study of managing an effective system of quality in organizations. Coverage includes the key TQM concepts developed by Demming, Juran, and Crosby, and others, a quality process model, primary considerations in planning and implementing a quality process, and familiarization with the tools used to plan and manage quality throughout the organization.

542 ERP-Enterprise Resource Planning Systems (3). Discusses the design and implementation of Advanced Manufacturing Technologies (AMT). This includes Just-In-Time (JIT) systems, Cellular and Flexible Manufacturing Systems (CM & FMS), Computer Integrated Manufacturing (CIM), and Enterprise Resource Planning (ERP) systems. It also explores the role that manufacturing plays in product development efforts and cross-functional teams. Other topics such as manufacturing strategy, maintenance, set-up and lot size reductions, group technology and focused factories, production and operations scheduling and control techniques, and the design of work systems are presented as well. Case Studies and group projects/presentations are used for instructional purposes. Students are also required to use the MAX software to perform an ERP system analysis. Prerequisites: BA 519 or equivalent.

543 Project Management (3). Planning and control of projects, to include network models, risk analysis, time reduction, resourse scheduling, leadership, and evaluation. Prerequisite: BA 519

544 ERP-Supply Chain And Logistics Management (3). A study of integrated enterprise-wide supply chain management and logistics. Topics include integrating forecasting system design, inventory management, distribution requirements planning, supply chain management, purchasing and and supplier/vendor networks, logistics, transporation network, and E-operations. Integrated enterprise-wide computer-based systems and network optimization are studied for both production and service operations. Prerequisite: BA 519 or consent of instructor.

547 Contemporary Issues in Operations Management (3). An integrative study of technical issues of operations including manufacturing planning (MRP-II), Just-In-Time, comparative productivity analysis, advanced manufacturing engineering methods and systems including CAD/CAM/CIM, flexible manufacturing systems, artificial intelligence and expert systems, and their impacts on both service and product operations. Prerequisite: BA 519 or equivalent.

550 Advanced Financial Management Theory and Policies (3). Advanced financial management covering topics such as working capital, financial structure, cost of capital, dividend policy and valuation. Discussions include both financial theory as well as financial policy. Includes exposure to literature central to the development of finance theory. Prerequisite: BA 532 or equivalent.

551 International Financial Management (3). This course analyzes present and future international financial market conditions and extends the decision-making tasks of financial management into the context of problems of the international and foreign financial systems. The financial constraints of the international business environment and their effect on standard concepts of financial structure problems, working capital management, foreign investment, and international banking practices. Prerequisite: BA 532 or equivalent.

552 Financial Markets and Institutions (3). A study of structure and operation of the major financial markets. The concept of flow of funds serves as the underlying mechanism bringing together the various private, public, and foreign sectors as they relate to the demand for and supply of loanable funds. Topics include consideration of short, intermediate, and long-term credit and equity market instruments; the level and structure of yields in financial assets; behavior of risk premiums; structure of financial institutions; and implications of alternate policy actions. Prerequisite: BA 532 or equivalent. Previous graduate coursework is recommended.

553 Investment Analysis (3). Development of a theoretical framework applicable to the solution of problems related to creation and management of the investment portfolio. Consideration is given to the analysis of risk, functions of security markets, sources of information, evaluation of securities, and measurement of investment return. Prerequisite: BA 532 or equivalent.

556 Management of Financial Intermediaries (3). This course addresses the management operations of selected financial intermediaries including commercial banks and thrift institutions. Attention is given to asset-liability structure, the development and delivery of financial services, institutional structure, legal and regulatory factors, and the dynamics of the competitive environment. Prerequisite: BA 532 or equivalent.

557 Derivative Securities (3). This course is designed to introduce students to the basic principles of financial risk management. The student should develop a working knowledge of issues regarding both the theoretical valuation and application of derivative securities. Applications will focus on techniques designed to manage financial risks in the corporate environment. Specifically, the course will focus on using futures, options, and swaps to hedge financial risks. Valuation issues will be explored to identify theoretical pricing fundamentals that can be applied toward valuing newly developed securities. Prerequisites: BA 501, BA 532, BDS 508, AND ACTG 517 or equivalents.

558 Risk Management and Insurance (3). This course introduces students to the principles of personal and corporate risk management. Personal risk management topics include: Personal insurance planning, annuity investing, benefits plans, social security, and personal liability management. Corporate risk management topics include: Managing corporate risk, reducing risk through hedging, and legal liability risk.

559 Strategic Financial Management (3). This non-quantitative, readings-based course seeks to impart the lateset concepts in strategic financial theory and rational economic thought. Major financial and economic developments such as signaling theory and agency are applied to a wide variety of contemporary problems facing businesses, governments, and individuals. Prerequisites: BA 532 or equivalent.

560 Buyer Behavior (3). A review of behavioral science concepts applicable to an understanding of constituent decision making. Special emphasis is placed on applications of these concepts, by the student, to problems of offer planning, pricing, distribution and promotion. Prerequisites: BA 531.

561 Promotional Strategies in Marketing (3). Emphasis will be placed on the organization's persuasive communications to customers and prospective customers within a framework of the system of distribution. The central focus concerns how marketing management allocates the promotional mix within the organization's total marketing program. Topics will include the following: 1) promotional mix, 2) campaign strategies, 3) campaign coordination and 4) follow-up control of promotional programs. Prerequisite: BA 531.

562 Marketing Research (3). This course requirement is designed to acquaint the student with the special problems of understanding and applying various measurement techniques to marketing problems. Specific topics to be investigated will depend upon the instructor's and the student's areas of interest and specific competencies. Prerequisites: BA 531, BDS 508.

563 Direct Marketing Theory (3). Supervised research in direct marketing areas of special interest under individual faculty direction for the purpose of developing and validating direct marketing theories. Prerequisites: BA 539.

575 Advanced Marketing Strategy (3). This course focuses on advanced marketing skills and practical techniques for defining and meeting the needs of the chosen market. The emphasis is on key drivers of marketing effectiveness, including creating a market-oriented culture, customer-focused information systems, the relationship of various components of marketing, and the response to marketing variables. A variety of pedagogical approaches, including applied projects, may be employed. Prerequisites: BA 531

580 Seminar in Finance (3). Advanced work in each of the above areas-Financial Management, Investment Analysis, and Financial Markets and Institutions would form the basis for the Seminar. Each topic selected would provide the opportunity for an investigative study on the part of the student. Major problems, hypotheses, and cases, together with the literature addressing the specific topic, would serve as the spring-board for classroom activity. Both written and oral reports would be required. Prerequisites: BA 532 or equivalent and consent of the instructor.

597 Independent Research in Business Administration (1-6). Study and research in areas of special interest under individual faculty direction. Admission to (A) Quantitative Analysis, (B) Finance, (C) Management Information Systems, (D) Marketing, (E) Production and Operations Management, (F) Unspecified, of student whose programs of study and research abilities warrant intensive study of either (1) the problems of practices characteristic of a particular industry or (2) advanced theory in the areas of a specialized management function. Prerequisite: Consent of instructor.

599 Thesis (1-9).

899 Required Graduate Enrollment (1).

Business Decision Sciences Courses

501E Introduction to Management Science (1-3). The design and application of scientific models for managerial decision making. Students will be introduced to linear programming, decision theory, utility, and other management science topics, and will become familiar with their application to the areas of production, logistics, inventory policy, advertising, maintenance, financial decision, etc. It is assumed that students have acquired basic skills in electronic spreadsheets and college algebra. Enrollment limited to those admitted to EMBA. Must take 3 hours to qualify for prerequisite for advanced courses. Must take 3 hours (BDS 530 or BDS 508) to qualify for program completion.

508 Statistical Analysis in Business (3). Data analysis and statistical inference in the context of business management. Communication of analysis and conclusions using text, numbers, and graphics is emphasized. Understanding the conceptual framework of probability and statistics as it relates to statistical tests and procedures is emphasized more than computational methods. Most of the work will be done using a computer spreadsheet. The course includes the topics of estimation, tests of hypotheses, analysis of variance, and multiple regression. Prerequisite: College Algebra.

512 Statistical Quality Control (3). A study of statistical methods of assuring and assessing quality in all organizational settings. Topics include methods of statistical process control (SPC), acceptance sampling (AS), Shewhart control charts, design of experiments (DOE) including those of Taguchi, and statistical theory of analyses popularized by Deming, Juran, and others. Where appropriate, the probability and the statistical theory of these methods are studied. Prerequisite: BDS 508 or a first statistics course, or equivalent

528 Decision Support and Expert Systems (3). The packaging and delivery of models, knowledge bases, data bases, and graphics to interactive software to support managerial decision making. Decision support systems via spreadsheet modeling. Artificial intelligence applications in business. May include a number of computer-oriented assignments. Prerequisite: BDS 508 and BIS 502.

530 Decision Analysis and Modeling with Spreadsheets (3). The modeling of business decisions in operations, finance and marketing, and the analysis of models using optimization, computer simulation, and decision theory. Modeling and analysis are conducted using the medium of a computer spreadsheet. The course focuses on the creation, critical evaluation, and improvement of models, as well as written and oral communication of analysis and conclusions. Prerequisite: BDS 508.

545 Forecasting Theory and Applications (3). A study of the essential concepts, theoretical basis and applications of alternative forecasting methods. Typical methods included are smoothing and decomposition time-series methods, regression methods, econometric models, single and multiple series autoregressive/moving average methods (ARIMA methods of Box-Jenkins). Prerequisite: BDS 508.

Business Information Systems Courses

502 Management Information Systems (3). Fundamental concepts of hardware, software, networking, system life cycle, enterprise systems, and strategic systems in a business context. Techniques in programming and web publishing.

552 Data Base Management (3). Data administration, including theory of relational databases and projects using relational data management packages. Data modeling and information engineering. Entity-relationship modeling. Database design, normalization, data dictionaries, distributed databases, database servers, data quality assurance, data integrity, SQL. May include a number of computer-oriented assignments. Prerequisite: BIS 502.

554 Systems Analysis, Design and Engineering (3). Tools for documenting information system requirements and design and implementation methods. Organization of software projects. Classes and objects. Requirements analysis fundamentals and methods. System specifications. Documentation and diagramming standards. Tool selection. Programming languages and methodology. Costs and schedule estimation. Project management. Program verification, metric, debugging and testing. Internal control issues. May include a significant project. Also offered as Accounting 566. Prerequisite: BIS 502.

556 Distributed Information Technology (3). Basics of data communication and telephony with how these are used to achieve business advantage. Voice, data and video communications. Networks, distributed computing, EDI, inter-organizational systems, and electronic commerce. Using Internet applications and running Internet services. Prerequisite: BIS 502.

558 Management and Economics of Computing (3). Procurement and management of computer systems. Economics of hardware and software. Cost-benefit analysis. Software acquisition, RFQs, RFPs, contract terms and conditions. End- user computing. Organizational location and staffing of computing. Distributed processing versus central DP center. Capacity planning. Contribution of computing to business objectives. Control, audit, and security of information technology. Legal and ethical perspectives. Computer center operations. Business policies about computing. International issues. May require a significant term paper. Prerequisite: One previous course in computer science or information systems.

580 Seminar in Information Systems (3). This seminar is provided for students interested in exploring advanced BIS topics not covered in the regularly offered courses. The content of this seminar may change from one offering to the next. Prerequisite: BIS 502.

Business Management and Administration Courses

504 International Management (3). Examination of the management of contemporary international business organizations through a study of the political, economic, social and technological factors and their relationship and impact upon the administrative activities and strategies of the international firm.

505 Organizational Behavior (3). A study of individual, group, and organizational behavior and processes. Examination of social and behavioral

sciences methods and theories which apply to the understanding of administrative social systems. Classroom activities will utilize lectures, laboratory training, and clinical cases.

506 Contract Negotiation and Dispute Resolution (3). This course surveys the conceptual framework for negotiating legally binding contracts and examines contempory institutions and processes for resolving contractual disputes. Particular attention will be given to identifying and appreciating strategies, practices, and specific rules by which binding contractual rights and duties are determined in the United States and in international jurisdictions. Working independently and in teams, students will assimilate the legal rules and negotiation strategies and apply them to common business transactions and disputes. Most business professionals face opportunities to negotiate and to resolve conflicts. This course provides students the solid preparation to maximize those real-life opportunities that arise in their management careers.

508 Law of Business Associations (3). Working individually and in teams, students study the legal rules that govern most common business relationships. These include the rules for creating and managing agency and partner relationships, LLC and other new joint ventures, as well as public and closely-held corporations. Student teams follow local public companies as they prepare and conduct their annual meetings and conduct mock negotiations to form a new business venture. Prerequisites: None.

510 Legal and International Environment of Business (3). This course provides an essential introduction to the domestic and international environment of business. Particular attention is given to the comparative historical development, cultural, economic, legal and political context for the conduct of business in the U.S. and abroad. Topic include international trade, international management, alternative modes of international operations, international finance and exchange rates, international marketing, international human resources, international business strategy, protection of property interest, including worldwide protection of intellectual property, private contracts, multilateral agreements, dispute resolution systems and the influence of government trade.

513 Economic Policy and Managerial Control (3). Analysis of the industrial foundations and economic institutions of modern times. The politics of industrial control, including power relationships in economic nationalization and planning. Theory of managerial industrialism and business enterprise.

516 Leading Teams (3). This course is designed to increase the student's understanding of team processes in organizational settings and to contribute to the student's ability to build and lead high-performing teams. The class will be utilized as a laboratory for the exploration of team leadership theory and research. Prerequisite: BMA 505.

525 Entrepreneurship: Managing Creativity and Innovation (3). The course examines the nature of creativity and innovation and how entrepreneurship involves the ability to identify market opportunity based on new ideas. Detailed attention is given to the entrepreneurial process: the concepts, skills, know-how and know-who, information, attitudes, alternatives and resources that entrepreneurs need to manage creativity in the process of creating something with tangible economic value.

533 Leadership and Change In Organizations (3). Study of the dynamics of leadership and change in organizational contexts with attention to both theory and practice. Classroom activities can include lectures, case discussions, group presentations, and experiential activities. Prerequisite: BMA 505, PA 548 or consent of instructor.

535 Small Business Management and Entrepreneurship (3). This course focuses on the nature of the entrepreneurial organization; its volatility and flux, where standard operating procedures are lacking and organizational structure, culture and leadership style are created anew each day. Successful small business management requires that a series of developmental challenges be identified and addressed if the venture is to succeed.

536 Strategic Management (3). A consideration of current problems of significance to the administrator and appropriate decision-making procedures relevant to the firm as a whole. Prerequisites: Completion of or concurrent with completion of Stage I requirements.

537 Competitive Strategies (3). Study of the processes of formulating and implementing competitive management strategies. Analytical techniques appropriate to the firm, the market or the industry will be emphasized. Major individual and/or group papers analyzing existing organizations will be required. Prerequisites: Must be taken in the student's final semester of the program.

541 Personal Entrepreneurial Strategy (3). This course is a cooperative offering between UMKC, University of Kansas, and Rockhurst University and is taught at Kauffman Legacy Park. The course applies the case method to allow the student to learn about the entrepreneur and the entrepreneurial process, understand the sacrifices and benefits of being an Entrepreneur, and develop professional skills relevant to entrepreneurial activity. Prior approval require for enrollment. Prerequisites: BA 531, BA 532, BMA 506.

542 Technology and New Ventures (TNV) I (3). This course will build the skills needed to create successful, high-value enterprises with technology. Emphasis will be on markets for technology, and venture capital. Case studies will emphasize the information technologies and energy/environmental technologies. Prerequisite: None

543 Technology and New Ventures II (3). This course will draw upon the skills developed in MA542 to enable student teams to prepare business plans for new ventures they might actually like to start. The information technologies and energy/environment will be emphasized, but students are welcome to propose any technologies. Prerequisites: MA 542, Technology and New Ventures I

545 Entrepreneurship and New Venture Creation (3). The objectives of this course are: (1) to build personal appreciation for the challenges and rewards of entrepreneurship in an independent mode by examining/simulating its environment; (2) to present and examine, through the use of complex case studies and high level guest lectures, economic, legal and managerial mechanisms proven useful in creating new wealth; and (3) to foster continued development of venture ideas, suitable as career entry options or for investments, using a tutorial approach to business plan development, presentation and evaluation. Suggested Prerequisites: BA 531, BA 532, BMA 506, and one of the following. BMA 525, BMA 535, or BMA 541.

546 Successful E-Commerce Strategies (3). The course focuses on major factors that influence success in electronic commerce-E businesses must deliver customer value and make a contribution to profit. Knowledge and ability to implement initiatives dealing with supply chain management (manufacturer, distributor, retailer), selecting business partners, effective marketing (customer acquisition and retention) are some of the topics covered in the class. The course will also focus on understanding customer value chain and successful, profitable e-business strategies. Drawing on success and failures in the market, we will describe key drivers for developing an e-business that will add up to real value and sustainable profit.

550 The Operation of International Business (3). The course reviews the basic decision-making and operations taking place within international business. Attention will be given to export/import activities of firms including global marketing & sourcing, transportation, finance, customs clearance, & legal issues such as intellectual property rights & agent/distributor agreements. Prerequisite: BMA 510.

555 International Marketing (3). This course focuses on marketing problems confronting international business managers and the ways they may be analyzed and resolved. The course content includes concepts and techniques useful in international marketing; effects of national differences on marketing practices; organization for international marketing; and strategy formulation for international markets. Prerequisites: BA 531 and BMA 510.

560 Strategic Human Resources (3). This course willprovide an overview of the theory, research and practices used to strategically align human resource policies and practices with the overall goals and objectives of organizations. The course will highlight ways in which HR policies and practices affect and are affected by organizations' environments and culture. Emphasis will be placed on high performance and innovative work practices. Particular attention will be given to assessing internal and external conditions and contexts in which HR policies and practices maximize effectiveness.

566 Strategic Staffing (3). This course presents theoretical frameworks and practical applications for determining optimal person-organization fit and person-job fit within organizations. Emphasis will be placed on integrating recruitment and selection strategies and practices with overall business strategies. The importance of strategically planning and implementing recruitment and selection processes will be addressed as it relates to various organizational contexts, including environmental threats and opportunities, organizational size, structure, and climate.

567 Total Rewards Management (3). This course presents both theory and practice for designing effective rewards systems within organizations. Compensation. (including base pay and incentives). Benefits and performance management will be covered from a strategic perspective. Characteristics of the work environment, such as recognition, work/life balance, and culture will also be considered in terms of their contribution to the total rewards systems.

580 Seminar in Organizational Behavior (3). Students will do research under the direction of a member of the faculty. Results of the research will be presented to a seminar composed of students and faculty. Students will be required to read original sources and demonstrate advanced competence in relating theory to a body of descriptive data. Prerequisite: BMA 505 OR PA 548

583 Leading With Integrity (3). Examination of the personal and ethical underpinnings of leadership, with special attention to issues of values, faith, and spirit. Activities will include discussion of readings and cases, personal exploration, and a weekend workshop near the end of the term. Student teams will chose a topic, write a paper, and make a class presentation. Prerequisite: Consent of the instructor.

585 Venture Capital Finance and Investment (3). This course is designed for students who which to learn about or become involved in the venture capital market as investors or intermediaries in emerging growth companies seeking capital. With this goal, the course will define the venture capital market and where it fits relative to other sources of capital, examine how private equity funds are raised and structured, how investments are sourced, selected, and negotiated, and the role of the value-added investor through investment to liquidity. The course presents and provides applications for various frameworks of valuing and structuring investment opportunities. Suggested Prerequisites: BA 531, BA532, MA 506, and one of the following: MA 525, MA 535, OR MA 541.

587 Seminar in Management and Administration A to G (1-6). A course on advanced and/or new topics in one of the following areas of Management Administration: (A) International, (B) Human Resources, (C) Law, (D) Organizational Behavior, (E) Strategic Management, (F) Entrepreneurship and (G) Unspecified. This course is designed to facilitate at least one of two purposes, an initial offering of a new course (prior to formal approval) or an initial and possibly final offering of new topics. New topics include those that are contemporary, cutting-edge, or advanced topics that are not currently covered by existing courses. Prerequisites: Various, including permission of instructor

591 Small Business Management Practicum (3). An integrated management course designed to examine the principles of business management applicable to solving the problems of small and medium size businesses and assisting in their development. Prerequisite: Completion of stage I requirements.

597 Independent Research (1-6). Study and research in areas of special interest under individual faculty direction. Areas are (A) International, (B) Human Resources, (C) Law, (D) Organizational Behavior, (E) Strategic Management, (F) Entrepreneurship and (G) Unspecified. Prerequisite: Consent of instructor

599 Thesis (1-9).

Health Administration Courses

571 Financial Management Issues Health & Human Services

Organizations (3). This course is intended to provide an overview of the financial management problems of health and human services organizations. A broad range of topics is examined: financial statements, ratio analysis, cost accounting, reimbursement and pricing, management of working capital, budgeting and programming, capital financing, and cash management.

575 Long-Term Care Policy & Administration (3). This course provides an overview of long-term care policy and administration, both for institutional and community-based services. Topics include public and private financing, regulatory systems, organization and management of care, and quality assurance. The course also emphasizes new developments in the field, such as managed long-term care systems, capitation and case mix reimbursement, and technologies for quality monitoring and assessment.

576 Managed Care Institutions (3). This course, offered by staff of the National Care for Managed Care Administration, emphasizes current issues associated with the provision of health care services through different kinds of managed care institutions. Particular attention will be given to issues surrounding cost-containment, quality of care, contracts, and regulation. Much of the discussion will focus on HMO's.

577 Health Service Administration and the Health Professions (3). The development of the health professions and occupations is examined as their internal and external relationships influence the structure of health care organizations and the services provided to clients. The focus of the course is on problems that administrators may encounter as they attempt to negotiate services for clients, build professional coalitions, and provide leadership within or outside health care institutions.

578 The Evaluation and Control of Health Services (3). This course focuses on developing evaluative skills associated with controlling the level and costs of health services. Epidemiologic concepts are introduced using clinical and community health examples. The concept of "at-risk" clients and populations are reviewed, and various attempts to measure risk are assessed. Issues relating to quality assurance are discussed, along with several examples of cost-effectiveness analysis.

586 Supervised Research in Health Services Administration (3).

Supervised research into either a current problem or process of health services administration. Topics are selected in conference with supervisor, who will also guide the student in other stages of the project. The emphasis is usually on field research.

Public Administration Courses

509 Government Contracting (3). A comprehensive introduction to the field of government contracts which identifies and analyzes the types of price, cost and incentive contracts; bidding, negotiation; warranties; change orders; cost recovery; terminations and other concepts found in federal procurement for the

purpose of developing familiarity with these practices as well as examining the impact of government procurement practices on national economic policy and technological development.

510 Research methods in Public Administration (3). This introductory course focuses on quantitative empirical research design and statistical analyses in relation to public administration issues and concerns.

525 Financial Accountability and Policy Development (3). Modern fiscal policy and its administrative implications to planning, budgeting, revenue administration, accounting and appraisal, and the process for assuring accountability in the development, timing, and execution of public programs. Prerequisite: PA 510.

526 The Politics of Administration (3). This course will introduce the subject of public administration from a political perspective. Special attention will be given to an examination of the administrative branch of government. More specifically, the course will focus on the demands directed to administrators from various sectors of the political system, ways in which administrators respond to those demands, and methods available for the analysis of public policies that help us assess the impacts that flow from administrators' actions.

530 Public Management (3). This course examines theories of public organizational design, structure and change, including various issues in the administration of public organizations. Questions of professional ethics and management in the public interest are also considered. This is the final course in the MPA core curriculum. Prerequisites: PA 525, PA 526, PA 544, PA 548 or concurrent enrollment.

535 Urban Policy and Administration (3). An examination of the formulation and administration of policies by urban governments. The course examines (a) the historical and intergovernmental contexts for decision making by urban governments, (b) the governmental forms and political processes employed in making these decisions, and (c) the various urban problems and service delivery issues which require decisions in the contemporary city.

536 Managing Urban Economic Development (3). This course explores what managers in the public, nonprofit and private sectors need to know about urban economic development. Topics include (a) theories of urban economic development, (b) varying forms of development (e.g., attraction of new industries, Central Business District development, neighborhood economic development), (c) policy managerial tools for stimulating development, and (d) issues of equity in economic development.

539 Urban and Regional Planning for Urban Administrators (3). This course is designed to provide students in urban administration with a comprehensive overview of the planning process. Course topics include a review of planning and the problems of effective planning implementation.

544 Program Evaluation and Analysis (3). Survey of the tools and procedures for evaluating and analyzing policies and programs in the public sector, including nonprofit and human services organizations. Consideration of such topics as definition of goals, developing measures of effectiveness, evaluation research designs, benefit-cost analysis, and the special problems of rational analysis in a political environment. Prerequisite: PA 510.

548 Leadership for Public Service (3). The two core purpose of this course are for students to learn about effective and ethical leadership, and for students to understand and develop their own capacity for leadership. The course is organized around three general themes: 1) leadership as relations with subordinates, including issues of work motivation; 2) leadership as lateral relations, including organizational politics and conflict management and resolution; and 3) leadership as influence in the organization's environment.

551 Strategic Management in Nonprofit Organizations (3). This is an advanced management course in the nonprofit management emphasis. Following review of the legal and economic uniqueness of private, nonprofit organizations, the course helps students develop a strategic management framework and apply the key concepts to the management of nonprofit organizations. Recommended prerequisites: PA 495 and PA 548.

552 Community Organizations and Public Policy (3). This course includes examination of both neighborhood organizations and organizations intended to promote other communities of interest. In relation to neighborhood organizations, topics considered include the varieties of neighborhoods, the role of neighborhood organizations in local politics, the use of neighborhoods in administrative and political decentralization and federal policy toward neighborhood insues. In relation to other community organizations, topics considered include the basis of such organizations, their roles in public affairs and their effects on policy processes.

553 Legal Framework & Financial Management of Nonprofit

Organizations (3). Utilizing a comparative approach the course examines the legal basis and tax treatment of private, nonprofit organizations in the U.S. Related topics also considered include concepts of fund and cost accounting, budgeting processes, earned income strategies, employee compensation and benefits practices, laws and regulations affecting lobbying, competition with business and unrelated business income tax.

555 Topics in Nonprofit Fundraising (1-3). In order to flexibly treat the variety of strategies and techniques of charitable fundraising, these courses will usually be offered in variable credit hour segments, covering traditional and emerging fundraising topics. Each semester, two two-credit-hour segments and two one credit-hour segments will be offered. The two credit nur courses - Organizing for Successful Fund Raising" and "Creating and Implementing the Annual Development Plan" - cover the basics of fund raising. The one-credit hour courses allow students to explore several different issues related to fund raising such as direct marketing and planned giving. These courses are recommended for nonprofit management students. Prerequisite: None.

555A Top in Nnprft Fndrsng: Organizing for Successful Fund Raising (1-3).

555B Top in Nnprft Fndrsng: Creatng & Implemntng Annual Devlpmnt Plan (1-3).

555C Top in Nnprft Fndrsng: Dirct Mrkting & Dirct Mail in Fund Raisng (1-3).

555D Top in Nnprft Fndrsng: Planned Giving & Major Gift Solicitation (1-3).

555E Top in Nnprft Fndrsng: Cntmprary Trnds/Ethcl Issues in Fund Rsng (1-3).

555F Top in Nnprft Fndrsng: Prospect Research and Proposal Writing (1-3).

555G Topics in Nonprofit Fundraising (1-3).

556 Innovation in Nonprofit Management and Leadership (3). This course provides an opportunity for students in the nonprofit management specialization to examine "breaking" innovations in nonprofit management and leadership. Intra- and inter-sectoral collaborative strategies and total quality management are illustrative examples. Other topics will be considered as warranted. This course is recommended for students who have completed PA 525, PA 548 and at least six hours of nonprofit management course work.

565 Topics in Urban Administration (1-3). To flexibly treat the variety of strategies, information, and techniques in urban administration and leadership, these courses will be offered in variable credit hour segments. Each semester combinations of one and two hour courses would be offered around traditional and emerging topics. An initial "basics" series will be offered on community development organizations, urban economic development and community development strategies.

570 Diversity in the Workplace (3). This course explores the many issues raised by the growing diversity of backgrounds (e.g., race, gender, culture) employees bring to the workplace. The course will examine diversity issues including demographics, relevant legislation, values questions, demands on management, and effects on service delivery to clients. To better illustrate the issues, some class sessions will feature guest lecturers representing a diversity of backgrounds and work settings.

581 Seminar in Urban Administration (3). Advanced work on special topics in urban administration. Topics will vary. Prerequisite: PA 535.

593 Internship Seminar (3-6). Combined classroom study and field internship. To be offered only when government agency internships approved by the Public Administration Committee are available. Prerequisite: 18 credit hours of completed courses.

598 Supervised Research (1-6). Study and research in areas of special interest under individual faculty direction. Areas are (A) Nonprofit Management, (B) Public Works, (C) Urban Administration, (D) Public Management, (E) International Management, (F) Public Financial Administration, (G) Unspecified. Prerequisite: Pre-registration, consent of instructor.

598A Supervised Research: Nonprofit Management (1-6).

598B Supervised Research: Public Works Administration (1-6).

598C Supervised Research: Urban Administration (1-6).

598D Supervised Research: Public Management (1-6).

598E Supervised Research: International Management (1-6).

598F Supervised Research: Public Financial Administration (1-6).

598G Supervised Research: Unspecified (1-6).

599 Thesis (1-9).

610 Inquiry in Public Administration and Affairs (3). This course is designed to provide Ph.D. students a thorough grounding in strategies of inquiry. Issues considered include competing metatheoretical paradigms and alternative conceptions of explanation in the social and policy sciences, the implications of such alternatives for empirical research, the variety and standards of qualitative and quantitative approaches to theory and research, theory construction, and research ethics. Contemporary problems in public administration and affairs research and theory are emphasized.

620 Literature of Public Affairs and Administration (3-6). This course grounds the student in the central ideas of the public affairs and administration literature and in the prominent themes of the discipline. The course is offered in two versions: A, in which the political science approach to public affairs and administration is emphasized; and B, in which the organizational theory and behavior approaches to public affairs and administration are emphasized. Ph.D. students whose coordinating discipline is public affairs and administration are ordinarily expected to complete both versions. Prerequisites for 620 A are completion of PA 525, 526 and 544 (or similar graduate level courses) and consent of the instructor. Prerequisites for 620 B are PA 548 and PA 530 (or similar graduate level courses) and consent of the instructor.

620A Literature of Public Affairs and Administration:Political Science (3-6).

620B Literature of Public Affairs and Admin:Org Theory & Behavior (3-6).

630 Learning in Public Affairs and Administration (3). This course is designed to focus on dissemination of information to various publics served by public affairs and administration professionals. The course reviews delivery systems, learning methodologies, and adult education concepts relevant to public affairs and administration.

631 Teaching in Public Affairs and Administration (3). The student delivers information under the guidance of a faculty member who acts as a mentor and coach through observation, analysis, and discussion. The focus may be on critical thinking as an orienting goal for developing learning and learning environments for adults.

650 Advanced Research in Public Affairs and Administration (3). The course enables the student to present advanced topics in their fields of research interest and to have detailed critique and contributions on that research by the faculty. Prerequisites: PA 610 and research requirements.

699 Dissertation and Research in Public Affairs and Administration (1-12). Dissertation research and writing in the Public Affairs and Administration discipline. Prerequisite: Consent of instructor.

899 Required Graduate Enrollment (1).

School of Computing and Engineering

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Interim Dean: Khosrow Sohraby

Division of Civil and Mechanical Engineering: Division Head: Bryan Becker 352 Flarsheim Hall (816) 235-**5550** http://www.umkc.edu/cme

Division of Computer Science and Electrical Engineering: Interim Division Head: Appie van de Liefvoort 546 Flarsheim Hall (816) 235-**1193** http://www.umkc.edu/csee

History

The University has offered engineering degree coursework since 1956, and has been ABET accredited since 1977. Increased technology demands during the mid-80s combined with a generous gift from Sprint, lead to the development of UMKCs high-tech computer science and telecommunications program. These disciplines were combined in 2001 to form the School of Computing and Engineering (SCE).

Mission

The mission of the School is to provide nationally competitive educational opportunities and focused research in Computing and Engineering generating the technical work force and conducting the research needed to drive the economic development of the region, including entrepreneurial activities.

Divisions and Degree Programs

The School of Computing and Engineering (SCE) has two divisions, the Division of Civil and Mechanical Engineering and the Division of Computer Science and Electrical Engineering. Each division offers undergraduate and graduate degrees in their discipline. The engineering degrees in civil, electrical and mechanical engineering are fully accredited by ABET (Accreditation Board for Engineering and Technology, Inc.). For advising, please refer to the SCE division sections in the catalog.

The School also participates in UMKC's Interdisciplinary Ph.D. program through four disciplines. Students interested in pursuing a doctoral degree in civil, electrical or mechanical engineering may select engineering as a discipline. Students interested in computer sciences may select computer networking, software architecture or telecommunications networking as a discipline. (See the School of Graduate Studies section of this catalog for details about the Interdisciplinary Ph.D. program.)

Graduate Assistantship Opportunities

A limited number of graduate assistantships and grader positions are available to fully-enrolled graduate students who have successfully passed the school's verbal and comprehensive exams. Priority will be given to students with excellent communication skills and to students in the IPhD program. Research Assistantships are also available through the various professors conducting research. Students must apply for these opportunities at the Student Assistantship Application site: http://www.sce.umkc.edu/saa.

Division of Civil and Mechanical Engineering

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Mailing Address

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Division Head:

Bryan R. Becker

Professors:

Bryan R. Becker (Division Head and Director of Mechanical Engineering), Martha Gilliland (Chancellor), Anil Misra (Director of Civil Engineering)

Associate Professors:

J. Kenneth Blundell, Mark F. McClernon, Deborah J. OBannon, Jerry R. Richardson

Assistant Professors:

Brian A. Fricke, Trent M. Guess, Ganesh Thiagarajan Visiting Associate Professors:

Forrest G. Lowe, Ben-Zion Rosenblum

Affiliate Faculty:

J. David Eick (Curators' Professor, School of Dentistry); J. Lawrence Katz (Professor, School of Dentistry); Paulette Spencer (Professor, School of Dentistry)

Adjunct Faculty:

Bob Hanlin, Dan Justice, Jim Mahoney Professors Emeriti:

C. Quinton Bowles, George F.W. Hauck, Rudolph L. Leutzinger, Sr., Donald R. Smith, William E. Stewart, Jr.

Civil Engineering

The American Society of Civil Engineers (ASCE) defines civil engineering as "the profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize economically, the materials and forces of nature for the progressive well-being of humanity in creating, improving and protecting the environment, in providing facilities for community living, industry and transportation, and in providing structures for the use of humankind". The CE program aims to prepare students with a breadth and depth in the technical knowledge so that they can work immediately in most areas of the profession including geotechnical engineering; hydraulics, hydrology, water resources; structural engineering; and transportation/ traffic engineering.

Program Description

The program offers the bachelors degree and the masters degree in civil engineering and participates in the UMKC Interdisciplinary Ph.D. program. The Bachelor of Science in Civil Engineering is accredited by the Accreditation Board for Engineering and Technology (ABET). The Master of Science in Civil Engineering has both thesis and non-thesis options. Students interested in pursuing a doctoral degree in civil engineering may select engineering as a discipline when applying for admission into the Interdisciplinary Ph.D. program. To accommodate part-time and working students, most of the undergraduate classes are conducted in the afternoons and graduate classes are conducted in the evenings.

The civil engineering program has a rich history in Kansas City. The University of Kansas City offered a General Engineering degree in the 1950's. The masters program in civil engineering was started in 1964 and later the undergraduate program was added in the early 1970s. Since 1977, the undergraduate program in civil engineering has been independently accredited by ABET. The program became a part of the School of Computing and Engineering (SCE) in January 2001 and is housed in Flarsheim Hall.

Career Opportunities

Kansas City is one of the premier centers of engineering design in the country. Numerous civil infrastructure design and construction firms with national and international reputation are headquartered in Kansas City. This offers a unique opportunity to our students, many of whom participate actively as interns or as employees with these firms during the course of their study, thereby, getting a balanced blend of course work and practical experience.

Job opportunities abound for engineering majors. In terms of starting salaries and the number of job offers, engineering graduates compare favorably with all other graduates. In addition, the civil engineering curriculum at UMKC equips the graduate with the analytic decision-making skills necessary to pursue diverse technical, managerial and entrepreneurial career opportunities.

Master of Science in Civil Engineering

The civil engineering program offers graduate students an opportunity to get a state-of-the-art education in dynamic, challenging and professionally significant specialty areas. Masters students are allowed to take up to half of their credits in other fields, such as management, geosciences etc., to encourage them to broaden their education beyond the civil engineering field. To accommodate part-time and working students, graduate classes are conducted in the evenings.

Admission

A baccalaureate degree in civil engineering or related disciplines with a grade-point average (GPA) of at least 3.0 in the last 60 hours of undergraduate engineering coursework is required. Pre-program requirements may be specified in case the Bachelors degree is in a discipline different than that to which the candidate is applying.

The following documents are required for admission consideration:

- 1. Application for admission
- 2. Official transcripts of all college coursework
- 3. TOEFL score (for international students only); a minimum test score of 550 is needed for acceptance in any graduate engineering program
- 4. Three letters of recommendation from professors at previous institutions or mentors at work
- 5. Official results of the Graduate Record Exam (GRE) are required for all applicants. A cumulative score of at least 1600 (verbal + quantitative + analytical) with 85% on the quantitative portion is required. GRE requirements may be waived for applicants with a baccalaureate from an ABET accredited program who have passed the Fundamentals of Engineering (FE) exam and have work experience.

Conditional admission may be granted when the minimum GPA and GRE requirements are not met but other indicators

promise applicants success in the program. To be fully admitted as a regular masters degree seeking student, the candidate must obtain a grade of "B" or better in the first nine hours of coursework and submit a satisfactory GRE score within the first semester of their program.

International Students

Use the international application form and return the application, along with required supporting materials, to the University of Missouri-Kansas City, Office of International Student Affairs.

Assistantships

The school has numerous assistantship positions available each semester. Typically awards are for quarter-time or half-time support, and may include tuition fee waivers.

Graduate Degree Options and Requirements

- Master of Science with *coursework only* requires the completion of a minimum of 30 credit hours of graduate coursework (300-level or higher). The graduate coursework must include at least 18 credit hours of 500/600-level courses.
- Master of Science with *project* requires the completion of a minimum of 30 credit hours, which includes 27 credit hours of graduate coursework (300-level or higher) and three credit hours of independent project (CE500). At least 18 credit hours must be at the 500/600-level. The candidate must submit a report prepared per the advisers guidelines and present the project work in front of a three-member project examining committee.
- Master of Science with *thesis* requires the completion of a minimum of 30 credit hours, which includes 24 credit hours of approved graduate coursework (300-level or higher) and six credit hours of thesis work (CE599). At least 18 credit hours must be at the 500/600-level. The candidate must submit a thesis prepared per the graduate school guidelines and orally defend the thesis work in front of a three-member thesis examining committee.

In addition, half of the required credit hours may be earned in other fields, such as management, geosciences etc., to allow students to broaden their education beyond the civil engineering field.

Transfer Credits

- With permission of the students graduate adviser, up to six credit hours of transfer graduate coursework may be transferred from other non-University of Missouri institutions.
- With permission of the students graduate adviser, up to 14 credit hours of transfer graduate coursework may be transferred from other University of Missouri institutions.
- However, at least 16 credit hours of graduate coursework must be taken at UMKC.

Civil Engineering Specialty Areas

Research and study are available in the following specialties:

- Construction engineering
- Environmental engineering
- Geotechnical engineering
- Hydraulics and hydrology
- Materials engineering
- Structural engineering
- Transportation engineering

Advising and Registration

The civil engineering program assigns a faculty member to be the students academic adviser throughout the duration of their study. Students are required to meet with their faculty adviser every semester prior to registration for the following semester. The faculty adviser guides the student in selecting courses that are necessary for the completion of the degree requirements and answers questions regarding elective course programs and options. During the advising period, the faculty adviser determines whether the student is meeting degree requirements by reviewing the program advisement form. Any deviations by a student are corrected immediately. Specific information regarding registration is found in the UMKC Class Schedule and on the UMKC Web site.

Academic Standing

A graduate student must maintain a cumulative GPA of 3.0 for all graduate coursework taken during the course of graduate studies. Should the cumulative GPA fall below 3.0, the student will be placed on probation. A student on probation must bring the cumulative GPA to a 3.0 by the end of the next semester or face possible dismissal.

Graduation

Students should apply for graduation when they register for their final semester coursework. All students must complete and file with the Division Office both the UMKC Application for Graduation form and the Divisional Program of Study form. Students selecting the *project* or *thesis* option must also file a Divisional Report of the Masters Examining Committee form. Students selecting the *thesis* option must file a Masters Thesis Report form and have their thesis approved by the UMKC Graduate School.

Doctoral Studies in Civil Engineering

Civil Engineering participates in the Interdisciplinary Ph.D. program of the University of Missouri-Kansas City as part of the Engineering discipline. Students interested in pursuing a doctoral degree in civil engineering may select Engineering as a discipline when applying for admission into the Interdisciplinary Ph.D. program. See the Interdisciplinary Ph.D. program information in the School of Graduate Studies section of this catalog for general and discipline-specific admission requirements and regulations for Interdisciplinary Ph.D. study with Engineering as one of the desired disciplines.

Mechanical Engineering

Mechanical engineering (ME) is one of the broadest of the engineering disciplines, therefore, mechanical engineers are the generalists of the engineering profession. Mechanical engineers design, construct, test, and operate many types of mechanical, thermal and biological devices. They are involved in almost every industry, including aerospace, automotive, bioengineering, communications, electronics, energy, food processing, HVAC, manufacturing, power generation and refrigeration, as well as business, government, and academia. The ME program aims to prepare students with a breadth and depth in technical knowledge so that they can work immediately in most of the areas of the profession.

Program Description

The program offers the bachelors degree and the masters degree in mechanical engineering and participates in the UMKC Interdisciplinary Ph.D. program. The Bachelor of Science in Mechanical Engineering is accredited by the Accreditation Board for Engineering and Technology (ABET). The Master of Science in Mechanical Engineering has both thesis and non-thesis options. Students interested in pursuing a doctoral degree in mechanical engineering may select engineering as a discipline when applying for admission into the Interdisciplinary Ph.D. program. To accommodate part-time and working students, most of the undergraduate classes are conducted in the afternoons and graduate classes are conducted in the evenings.

The mechanical engineering program has a rich history in Kansas City. The University of Kansas City offered a General Engineering degree in the 1950's. The masters program in mechanical engineering was started in 1964 and later the undergraduate program was added in the early 1970s. Since 1977 the undergraduate program in mechanical engineering has been independently accredited by ABET. The program became a part of the School of Computing and Engineering (SCE) in January 2001 and is housed in Flarsheim Hall.

Career Opportunities

Kansas City is one of the premier engineering centers in the country. Numerous engineering and manufacturing firms with national and international reputation are headquartered in Kansas City. This offers a unique opportunity to our students, many of whom participate actively as interns or as employees with these firms during the course of their study, thereby getting a balanced blend of course work and practical experience.

Job opportunities abound for engineering majors. In terms of starting salaries and the number of job offers, engineering graduates compare favorably with all other graduates. In addition, the mechanical engineering curriculum at UMKC equips the graduate with the analytic decision-making skills necessary to pursue diverse technical, managerial and entrepreneurial career opportunities.

Master of Science in Mechanical Engineering

The mechanical engineering program offers graduate students an opportunity to get a state-of-the-art education in dynamic, challenging and professionally significant specialty areas. Masters students are allowed to take up to half of their credits in other fields, such as management, mathematics, etc., to encourage them to broaden their education beyond the mechanical engineering field. To accommodate part-time and working students, graduate classes are conducted in the evenings.

Admission

A baccalaureate degree in mechanical engineering or related disciplines with a grade-point average (GPA) of at least 3.0 in the last 60 hours of undergraduate engineering coursework is required. Pre-program requirements may be specified in case the Bachelors degree is in a discipline different than that to which the candidate is applying.

The following documents are required for admission consideration:

- 1. Application for admission
- 2. Official transcripts of all college coursework
- 3. TOEFL score (for international students only); a minimum test score of 550 is needed for acceptance in any graduate engineering program
- 4. Three letters of recommendation from professors at previous institutions or mentors at work
- 5. Official results of the Graduate Record Exam (GRE) are required for all applicants. A cumulative score of at least 1600 (verbal + quantitative + analytical) with 85% on the quantitative portion is required. GRE requirements may be waived for applicants with a baccalaureate from an ABET accredited program who have passed the Fundamentals of Engineering (FE) exam and have work experience.

Conditional admission may be granted when the minimum GPA and GRE requirements are not met, however, other

indicators promise applicants success in the program. To be fully admitted as a regular masters degree seeking student, the candidate must obtain a grade of B or better in the first nine hours of coursework and submit a satisfactory GRE score within the first semester of their program.

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Assistantships

The school has numerous assistantship positions available each semester. Typically awards are for quarter-time or half-time support, and may include tuition fee waivers.

Graduate Degree Options and Requirements

- Master of Science with *coursework only* option requires the completion of a minimum of 30 credit hours of graduate coursework (300-level or higher). The graduate coursework must include at least 18 credit hours of 500/600-level courses.
- Master of Science with *project* requires the completion of a minimum of 30 credit hours, which includes 27 credit hours of graduate coursework (300-level or higher) and three credit hours of independent project (ME 500). At least 18 credit hours must be at the 500/600-level. The candidate must submit a report prepared per the advisers guidelines and present the project work in front of a three-member project examining committee.
- Master of Science with *thesis* option requires the completion of a minimum of 30 credit hours of graduate coursework (300-level or higher). The graduate coursework must include at least 24 credit hours of approved graduate coursework (300-level or higher) and six credit hours of thesis work (ME 599). At least 18 credit hours must be at the 500/600-level. The candidate must submit a thesis prepared per the graduate school guidelines and orally defend the thesis work in front of a three-member thesis examining committee.

In addition, half of the required credit hours may be earned in other fields, such as management, mathematics, etc., to allow students to broaden their education beyond the mechanical engineering field.

Transfer Credits

- With permission of the students graduate adviser, up to six credit hours of transfer graduate coursework may be transferred from other non-University of Missouri institutions.
- With permission of the students graduate adviser, up to 14 credit hours of transfer graduate coursework may be transferred from other University of Missouri institutions.
- However, at least 16 credit hours of graduate coursework must be taken at UMKC.

Mechanical Engineering Specialty Areas

Research and study are available in the following specialties:

- Biomaterials
- Biomechanics
- Biothermics
- Dynamics and controls
- Energy systems
- Fluid dynamics
- Heat transfer
- Manufacturing
- Material science

Advising and Registration

The mechanical engineering program assigns a faculty member to be the students academic adviser throughout the duration of their study. Students are required to meet with their faculty adviser every semester prior to registration for the following semester. The faculty adviser guides the student in selecting courses that are necessary for the completion of the degree requirements and answers questions regarding elective course programs and options. During the advising period, the faculty adviser determines whether the student is meeting degree requirements by reviewing the program advisement form. Any deviations by a student are corrected immediately. Specific information regarding registration is found in the UMKC Class Schedule and on the UMKC Web site.

Academic Standing

A graduate student must maintain a cumulative GPA of 3.0 for all graduate coursework taken during the course of graduate studies. Should the cumulative GPA fall below 3.0, the student will be placed on probation. A student on probation must bring the cumulative GPA to a 3.0 by the end of the next semester or face possible dismissal.

Graduation

Students should apply for graduation when they register for their final semester coursework. All students must complete and file with the Division Office both the UMKC Application for Graduation form and the Divisional Program of Study form. Students selecting the *project* or *thesis* option must also file a Divisional Report of the Masters Examining Committee form. Furthermore, students selecting the *thesis* option must file a Masters Thesis Report form and have their thesis approved by the UMKC Graduate School.

Doctoral Studies in Mechanical Engineering

Mechanical Engineering participates in the Interdisciplinary Ph.D. program of the University of Missouri-Kansas City as part of the Engineering discipline. Students interested in pursuing a doctoral degree in mechanical engineering may select Engineering as a discipline when applying for admission into the Interdisciplinary Ph.D. program. See the Interdisciplinary Ph.D. program information in the School of Graduate Studies section of this catalog for general and discipline-specific admission requirements and regulations for Interdisciplinary Ph.D. study with Engineering as one of the desired disciplines.

Civil Engineering Courses

500 Problems (1-6). Supervised investigation in civil engineering to be presented in the form of a report. Prerequisite: Graduate standing.

501 Advanced Topics in Civil Engineering (1-3). Current technical developments in civil engineering.

501L Advanced Topics in Civil Engineering (1-3).

525 Advanced Reinforced Concrete Design (3). Designed of eccentric and combine footings, retaining walls, two way floorslabs, design and analysis of multistory building frames, and introduction of prestressed concrete. Prerequisite: CE 422

536 Advanced Soil Mechanics (3). Theoretical soil mechanics as applied to solution of specific engineering problems. Prerequisite: CE 335.

599 Thesis Research (1-6). Independent investigation in the field of civil engineering to be presented in the form of a thesis.

601 Doctoral Topics in Civil Engineering (1-3). Current technical developments in civil engineering.

602 Directed Reading in Civil Engineering (1-3). Faculty supervised readings course. Prerequisite: Graduate standing. Offered: Fall and winter.

607 Numerical Methods in Engineering (3). Classification and numerical solution of engineering problems–ordinary and partial differential equations, algebraic equations. Includes initial, boundary, eigen-# and characteristic-value problems. Prerequisite: Math 345.

621 Continuum Mechanics (3). (Same as Mechanical and Aerospace Engineering 411). Introductory course in the mechanics of continuous media. Basic concepts of stress, strain, constitutive relationships; conservation laws are treated using Cartesian tensor notation. Examples from both solid and fluid mechanics investigated. Prerequisites: CE 351, Math 345, and CE 276.

622 Theory of Elasticity (3). (same as Mechanical and Aerospace Engineering 412). Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods.

623 Theory of Plates and Shells (3). (same as Mechanical and Aerospace Engineering 413). Bending of plates with various loading and boundary conditions. Deformations, stresses in thin shells.

624 Theory of Elastic Stability (3). Bucklingof columns, beams, rings, curved bars, thin plates, shells.

645 Water Quality Modeling (3). Derivation and application of models for describing oxygen budget, nutrient exchange, and biological productivity in streams, lakes and estuaries. Prerequisite: CE 342. Offered:

646 Physiochemical Treatment Processes (3). Fundamental principles, analysis and modeling of physical and chemical processes for water and wastewater treatment. Prerequisite: CE 342.

647 Biochemical Treatment Processes (3). Biochemical principles, kinetic models and energy considerations in the design of biological wastewater treatment processes. Prerequisite: CE 342.

649 Design of Water and Wastewater Treatment Facilities (3). Development of design criteria and their application to the design of water and wastewater treatment facilities. Prerequisite: CE 342.

651 Fundamentals of Fluid Mechanics (3). Fundamentals of fluid motion, lecture and laboratory. Instrumentation, technique and analysis for experimental studies in fluid mechanics.

656 Advanced Hydraulic Engineering (3). Rapidly varied flow and design of transition structures. Hydraulic design of spillways, reservoirs and related structures.

676 Finite Element Methods (3). Prerequisite(s): CE421 or ME 486

679 Dynamics of Structures (3). (same as Mechanical and Aerospace Engineering 459). Study of the dynamic behavior of structures. Analysis of equivalent lumped parameter systems for the design of structures in a dynamic environment. Prerequisites: CE 321, CE 421, ME 285.

699 Research and Dissertation (1-9). Doctoral dissertation research.

Mechanical Engineering Courses

500 Problems (1-6). Supervised investigation in mechanical engineering to be presented in the form of a report.

501 Advanced Topics in Mechanical Engineering (3).

504 Advanced Metallurgy Principles (3). Advanced treatment of physical metallurgy principles to provide a theoretical understanding of engineering materials. Prerequisite: ME 324.

533 Statistical Thermodynamics (3). Statistical methods of evaluating thermodynamic properties. Elements of quantum mechanics, statistical mechanics and kinetic theory applied to topics of engineering thermodynamics. Prerequisite: ME 399.

534 Fracture Mechanics I (3). Mechanics of flawed structure. Concepts include Griffith theory. Barenblatt's theory, Irwin analysis, energy analysis of cracked bodies, fracture toughness testing, plane strain, plane stress, transition temperature concepts, subcritical flaw growth. Prerequisite: ME 324.

535 Heat Transfer-Conduction (3). Distribution of temperature and temperature history within solids by the four essential methods of evaluation of these temperature fields. Prerequisite: ME 399.

542 Introduction to Computational Fluid Dynamics and Heat

Transfer (3). Introduction to the principles and development of the finite-difference approximations to the governing differential equations of viscous and inviscid fluid flow, as well as heat transfer. Introduction to discretization methods and the calculation of flow fields, convection, diffusion and conduction. Prerequisites: ME 351, ME 399, and ME 441.

544 State Variable Methods in Automatic Control (3). State variables for continuous and discrete-time dynamic control systems; controllability and observability; optimal control of linear systems. Prerequisites: ME 458. Same as ECE 544.

545 Instrumentation Theory (3). Applied theory of dynamical and energizing systems for analyzing, computing, control devices. Prerequisite: ME 352 and ME 362.

558 Dynamical Theory (3). Engineering principles and application in mathematical expression of energy, force, inertia system. Prerequisite: ME 485 and Math 345.

595 Microscale Heat Transfer (3). Review of existing models. Concept of thermal lagging and the second-law admissibility. Applications to low temperatures, thermal processing of thin-film devices; amorphous materials; advanced composites. Prerequisites: ME 399.

599 Research (1-99). Independent investigation in field of mechanical engineering to be presented as a thesis.

601 Doctoral Topics in Mechanical Engineering (3).

601A Doctoral Topics in Mechanical Engineering (3).

601S Doctoral Topics in Mechanical Engineering (3).

602 Magnetogasdynamics (3). Flow of electrically conducting fluids in the presence of an applied electromagnetic field. Same as ECE 602.

610 Seminar (1). Review recent investigations, projects of major importance in mechanical engineering.

616 Theory of Plasticity (3). Plastic yield conditions and stress-strain relations. Behavior of elastic-perfectly plastic members. Plain strain in plastic members. Prerequisite: ME 622 or instructor's consent.

618 Advanced Dynamics (3). Fundamental principles of advanced rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods. Prerequisites: ME 285K and Mathematics 345.

621 Continuum Mechanics (3). Introductory course in the mechanics of continuous media. Basic concepts of stress, strain, constitutive relationships; conservation laws are treated using Cartesian tensor notation. Examples from both solid and fluid mechanics investigated. Prerequisite: ME 351, MATH 345 and CE 276. Same as CE 621

622 Theory of Elasticity (3). Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods. Same as CE 622.

623 Theory of Plates and Shells (3). Bending of plates with various loading and boundary conditions. Deformations, stresses in thin shells. Same as CE 623.

624 Theory of Elastic Stability (3). Buckling of columns, beams,rings, curved bars, thin plates, shells. Same as CE 624.

627 Dynamics of Machinery (3). Dynamic balancing or rotating and reciprocating components of turbo-machinery and internal combustion engines. Gas torque analysis, vibration stress analysis and equivalent systems. Numerical and graphical techniques. Prerequisite: ME 484.

630 Boundary Layer Theory (3). Fluid motion at high Reynolds Number. Derivation of Navier-Stokes equations and boundary layer equations. Methods of solution. Transition to turbulent flow. Completely developed turbulent flow. Prerequisite: ME 441.

636 Heat Transfer-Convection (3). Principles of heat transfer by convection, review of boundary layer theory, laminar and turbulent heat transfer, temperature-dependent fluid properties, high velocity heat transfer and an introduction to mass transfer. Prerequisites: ME 399 and ME 630.

637 Heat Transfer-Radiation (3). Advanced study of engineering radiation heat transfer. Concepts of electromagnetic theory. Development of thermal radiation laws from thermodynamic laws. Analysis of grey and non-grey systems with intervening gases. Study of recent literature. Prerequisites: ME 399.

638 Introduction to Turbulence (3). Introduction to the physical phenomena of turbulence, supported by mathematical and statistical descriptions. Especially appropriate for engineers involved in research aspects of momentum, heat, and mass transport. Prerequisite: ME 441

639 Introduction to Two Phase Flow (3). An introduction to the analysis of the mechanics and transport processes in two phase flows. Prerequisite: ME 441.

644 Fracture and Fatigue Prevention in Engineering Practice (3). Practical design problems. Introduction to retrofit design, maintenance, product improvement and new design from a fatigue and fracture prevention philosophy. Fail safe and safe life designs are presented. Prerequisite: ME 534.

651 Computational Fluid Dynamics (3). Principles and development of the finite-difference approximations to the governing differential equations of viscous and inviscid fluid flow. Application to selected model equations. Introduction to boundary layer and Navier-Stokes codes, and to grid generation. Prerequisite: ME 542.

660 Combustion (3). Study of advanced topics in flames and combustion. Detonation and deflagrations, supersonic combustion, air pollution. Prerequisite: ME 441.

676 Finite Element Methods (3). The concepts and fundamentals of the finite element method with applications to problems in solid and fluid mechanics. Prerequisite: ME 486 or CE 421. Same as CE 676

679 Dynamics of Structures (3). Study of the dynamic behavior of structures. Analysis of equivalent lumped parameter systems for the design of structures in a dynamic environment. Prerequisite: ME 484. Same as CE 679.

685 Advanced Vibration Analysis (3). Advanced topics in vibration theory and its application to Mechanical systems. Topics include vibration analysis of multi-degree of freedom, distributed and nonlinear systems, random vibration analysis, and vibration control. Prerequisite: ME 484 or instructor's consent.

699 Research and Dissertation (1-9). Doctoral dissertation research.

Division of Computer Science and Electrical Engineering

546 R.H. Flarsheim Hall 5110 Rockhill Road (816) 235-**1193** Fax: (816) 235-**5159** csee@umkc.edu http://www.umkc.edu/csee

Mailing Address

University of Missouri-Kansas City Computer Science and Electrical Engineering Division 546 Flarsheim Hall 5100 Rockhill Road Kansas City, MO 64110-2499

Interim Division Head:

Appie van de Liefvoort

Professors:

Lein Harn, Richard Hetherington, Vijay Kumar, Deep Medhi, William Osborne (Dean), E.K. Park, Xiaojun Shen, Khosrow Sohraby, Appie van de Liefvoort

Associate Professors:

Ghulam Chaudhry, Yijie Han, Jerome Knopp, Jerry Place, Jerry Stach

Visiting Associate Professor:

Mary Lou Hines (Vice Provost for Strategic Partnerships) Assistant Professors:

Cory Beard, Deb Chatterjee, Deendayal Dinakarpandian, Yugyung Lee, Ken Mitchell, Nihat Cem Oguz, Prem Uppuluri, Yu-Ping Wang

Assistant Professor Emeritus:

David Skitek

Research Assistant Professor:

Wen Hsin

Visiting Assistant Professor:

- Robert Cotter
- Lecturers/Assistant Lecturers:

Eddie Burris, Brian Hare, Mark Hieber, Judy Mullins Adjunct/Affiliate Faculty:

David Bodde (Professor, Bloch School), Mark Hoffman (Cerner), Peter Rogan (Associate Professor, Children's Mercy Hospital and UMKC School of Medicine), Jeff Rydberg-Cox (Assistant Professor, Department of English Language and Literature)

Description

The CSEE Division is one of the two divisions in the School of Computing & Engineering (SCE) at the University of Missouri-Kansas City. The CSEE Division has about 25 full-time faculty members who are very active in research with funding from NSF, DARPA and industries. Recently, four NSF grants were awarded to CSEE faculty (including an NSF CAREER award). We have a strong partnership with Sprint Corporation which is headquartered in Kansas City. In the life sciences area, we're building new partnerships with life and health sciences schools at UMKC and life sciences partners in the Kansas City area through the Kansas City Area Life Sciences Institute (KCALSI).

We have research strengths in the following areas:

- Computer Networking/Telecommunications (network security, network design, performance analysis, protocols, routing, teletraffic modeling, wireless communications, Digital Signals, queueing theory, graph algorithms, etc.),
- Software Architecture (Object-Oriented Design & Analysis, Middleware, Intelligent Agents, Peer-to-Peer Computing),

- Database/Information Management (Mobile Databases, Data Mining, Knowledge Discovery),
- Digital Signal Processing,
- Computer Engineering,
- BioInformatics and
- R.F./Antenna and Electromagnetics.

The CSEE Division is committed to excellence in teaching. We stay on the top of the technology curve and continually offer new courses in emerging/hot topics. Our graduates are sought after by regional as well as national companies.

The Division currently has about 750 students. Of that, around 500 are at the undergraduate level (for the different degree programs combined) and 250 are at the Masters level (for the different degree programs combined); additionally, about 40 doctoral students participate in UMKC's Interdisciplinary Ph.D. Program through a discipline in CSEE.

Student Organizations

The SCE **Student Council** addresses the need of the students within the School of Computing and Engineering. CSEE encourages every student to actively participate in a student organization that matches his or her interests:

ACM (Association for Computing Machinery) is the leading professional organization in Computer Science and its student chapter in our CSEE Division is very active.

AITP (Association of Information Technology Professionals) caters to the interest of both information technology students as well as business students.

IEEE (Institute of Electrical and Electronics Engineers) is the leading professional organization in Electrical Engineering. Many (if not most) in the Computer Science profession are also members of IEEE. Our student chapter won the prestigeous **Region 5 2003 RAB Student Branch Membership Growth Award.**

Eta Kappa Nu is the National Honor Association for electrical and computer engineering students.

Graduate Programs

Computer Science and Electrical Engineering Division offers a Master of Science in Computer Science (M.S.-C.S.) and Master of Science in Electrical Engineering (M.S.-E.E.).

Master of Science in Computer Science

The University of Missouri-Kansas City has created an exciting and uniquely designed program of graduate study in computer science. Significant changes have occurred within this discipline in recent years. The graduate program in computer science reflects those changes, providing in-depth education in the new technology and skills most in demand in this growing industry.

The UMKC graduate student has the unique opportunity to get a concentrated state-of-the-art education in a limited number of the most dynamic, challenging and professionally significant specialty areas. This is made possible by unusual advantages which the UMKC program possesses:

- An interdisciplinary approach to the new technology.
- Faculty who are each actively doing research in these areas.

Students can earn an M.S. degree in Computer Science with an emphasis in computer networking, telecommunications networking, software engineering, or bioinformatics. Many courses are offered in these emphasis areas. Contact info: (816) 235-**1193**, sce@umkc.edu.

Admission Requirement

The University of Missouri-Kansas City's graduate program in computer science will accept college and university graduates

whose past performance indicates an ability to succeed in graduate study in computer science. This ability can be demonstrated by the following undergraduate preparation.

- 1. A sound background in computer science as indicated by an above-average understanding (e.g. a cumulative GPA in CS coursework of 3.0 or better with no single course grade lower than 2.0) of the content of the following courses:
 - Problem Solving and Programming I (CS 101)
 - Problem Solving and Programming II (CS 201)
 - Introduction to Computer Architecture (CS 281)
 - Discrete Structures I and II (CS 191, 291)
 - Data Structures and Algorithms (CS 352)
 - Applied Probability (CS 394R)
 - Introduction to Operating Systems (CS 431)
 - Advanced Computer Architecture (CS 481)
- 2. A sound background in mathematics as indicated by an above average understanding (e.g. a GPA of 3.0 or better with no single course grade lower than 2.0) of calculus (minimum of 10 hours) and of the content of at least two additional upper-level courses in areas such as linear algebra, differential equations, abstract algebra, numerical analysis or mathematical logic.
- 3. A GPA of 3.0 or better in all undergraduate work.
- 4. Graduate Record Examination (GRE) scores of at least the 75th percentile on quantitative and 50th percentile on verbal and analytic parts.
- 5. For international students, a minimum test score of TOEFL 550/ CBT 213 is needed.
- 6. A prospective student who wants to be considered for acceptance to the M.S. degree program should submit the following documents:
 - Transcripts for all graduate and undergraduate work completed so far; syllabi of these courses (or a URL to these) is strongly suggested,
 - Copies of academic and scholarly diplomas received,
 - GRE scores and, for international students, TOEFL scores, as well as a statement of purpose, i.e. a oneor two-page essay in which the prospective students indicate their career objectives and
 - For international students with a degree from outside the USA, it is strongly advised that the syllabus for coursework taken at their undergraduate institutions be included. Further, a certified statement clarifying how the final grade is computed should be included.

It is possible that a prospective student has obtained a solid understanding of either computer science or mathematics through work or other experience rather than formal study. These students must submit a detailed description of such experience and ask a supervisor to write a letter of reference supporting the application.

Applications will be reviewed by the Master's Committee when all documentation is received. For full consideration for the semester indicated, completed applications should be received by

- For Fall semester admission (semester starts in August): For US students/Permanent Residents: June 1st; For International Students: February 1 (for financial consideration).
- For Winter semester admission (semester starts in January): US students: November 1st of the preceding year; International students: October 1st of the preceding year.

United States citizens or permanent residents should submit application forms and required supporting materials to:

Mailing Address

University of Missouri-Kansas City Office of Admissions 120 Administrative Center 5100 Rockhill Road Kansas City, MO 64110-2499

The telephone number is (816) 235-1111.

International students should use the international application form and return the application, along with required supporting materials, to:

Mailing Address

University of Missouri-Kansas City Office of International Student Affairs 5100 Rockhill Road Kansas City, MO 64110-2499

The telephone number is (816) 235-1113. The e-mail address is isao@umkc.edu.

Prospective students can request additional information or request information regarding their application by contacting UMKC at the above address or by sending e-mail to: sce@umkc.edu.

Financial Assistance

A variety of financial awards are available to graduate students. The most common awards for Computer Science graduate students are Chancellor's non-resident awards (CNR), and graduate teaching and graduate research assistantships, as explained below.

Graduate Teaching and Research Assistantships

There are a limited number of Teaching Assistantship positions available each semester. The actual number awarded each semester is based on enrollment. Typically, awards are for quarter-time or half-time support. Research assistantships might also be available from individual faculty members. These are usually supported by research grants/contracts and are usually not awarded to prospective students. Due to high enrollment in the masters program, getting any asssistantships in the first semester is usually difficult.

Chancellor's Non-Resident (CNR) Award

This award can be awarded to graduate students newly admitted to the Masters program. The award covers the non-resident portion of the UMKC educational fees. To receive this award, the student must be nominated by the MS admission committee to the University's Financial Aid and Scholarships office. The number of awards available varies each year. Awards are made for the fall semester only; however, a student given an award could delay his/her arrival until the following winter semester. This award is available to both non-residents of Missouri and international students. Since the number of awards is limited, this is a very competitive award which goes to our best applicants.

Advising

Initially, the student will be advised by the academic adviser assigned to them during the first semester of enrollment. In order to enroll in any course, the student must have the signature of the adviser. No student can enroll without such a signature. If a student enrolls in a class without their advisers signature or approval, that class may not count towards graduation requirements. Please also see the section 'Starting the Program'.

In the semester that results in 12 hours of credit toward the master's degree, the student should decide between a thesis

option and a non-thesis option. If the student decides on a non-thesis option, he should consult with his or her adviser and submit a plan of study for approval. If the student decides on a thesis option, he or she should seek a thesis adviser, who then also becomes the academic adviser. The thesis adviser must be a full member of the graduate faculty and, in collaboration with the student, will then appoint two other graduate or associate graduate faculty members to be on the student's thesis committee. The thesis committee may consist of more than three members, but the majority of committee members must have full graduate faculty status. Again, a plan of study must be submitted for approval.

Curricular Description

The graduate program in Computer Science is unique and dynamic and is tailored for specialization in computer networking, telecommunication networking, software engineering, or bioinformatics.

Core Requirement

All students are required to complete a core curriculum: CS 592 and two courses selected from CS 511, CS 520, CS 551, and CS 566.

Primary Emphasis Area

All students are required to complete courses in a primary concentration area. Students following the thesis option must complete at least 9 credit hours from 500/600-level courses in this concentration, students following the non-thesis option must complete at least 12 credit hours from 500/600-level courses in this concentration. The pre-approved areas for primary concentrations are:

- Computer Networking, such as CS 520, CS 521, CS 522, CS 526 and others
- Telecommunications Networking, such as CS 511, CS 513, CS 514, CS 517 and others
- Software Engineering, such as CS 551, CS 552, CS 554, and others
- Bioinformatics, such as CS 566, CS 560, CS 567, CS 570 and others

If a student desires a primary concentration other than these, a petition must be submitted to the Graduate Committee requesting that a primary concentration be recognized for this student's specific degree plan. It should state specifically which courses the student wants to include in this concentration, it should explain why these courses together form a coherent group and how these courses fit the student's academic goals. Students must seek permission before including these other courses in their program of study.

Secondary Emphasis Area

All students are required to complete at least two 500/600-level courses a secondary concentration area. The pre-approved areas for secondary concentrations are:

- Computer Networking, such as CS 520, CS 521, CS 522, CS 526 and others
- Telecommunications Networking, such as CS 511, CS 513, CS 514, CS 517 and others
- Software Engineering, such as CS 551, CS 552, CS 554, and others
- Bioinformatics, such as CS 566, CS 560, CS 567, CS 570 and others

If a student desires a secondary concentration other than these, a petition must be submitted to the Graduate Committee requesting that a secondary concentration be recognized for this student's specific degree plan. It should state specifically which courses the student wants to include in this concentration, it should explain why these courses together form a coherent group and how these courses fit the student's academic goals. Students must seek permission before including these other courses in their program of study.

Degree Requirement

To earn an M.S. degree in Computer Science, the student must satisfy both the general Master of Science degree requirements of the University of Missouri-Kansas City and the requirements of CSEE Division, depending on thesis or non-thesis options as outlined below. For descriptions of concentration areas, see the appropriate heading later in this section.

Requirements specific for thesis option

- 1. Complete a minimum of 30 hours of approved coursework for graduate credit with a cumulative GPA of at least 3.0;
- 2. Complete a minimum of 3 hours CS 599 Research and Thesis;
- 3. Complete a minimum of 9 hours in the primary concentration area;
- 4. Contact a thesis adviser in the semester in which the student completes 12 hours of graduate work;
- 5. Present evidence of research abilities in the form of a master's thesis resulting from enrollment in at least 3 hours of CS 599 Research and Thesis;
- 6. Pass a general oral examination which may cover all the work covered in the student's graduate program; and
- 7. Satisfy all common requirements (see below).

Requirements specific for non-thesis option

- 1. Complete a minimum of 36 hours of approved coursework for graduate credit with a cumulative GPA of at least 3.0;
- 2. Complete a minimum of 12 hours in the primary concentration area;
- 3. Contact an adviser after completing 12 hours of graduate work to complete the program of study; and
- 4. Satisfy all common requirements (see below).

Common requirements and limitations to both options

- 1. Satisfy the core courses as defined by the computer science faculty, presently CS 592 and two of the four courses: CS 511, CS 520, or CS 551, or CS 566;
- 2. Complete a minimum of 6 hours in the secondary concentration area;
- 3. Each student must have a plan of study approved by both his or her supervisory committee and the graduate officer after completing 12 hours of graduate work;
- 4. No more than 9 hours total from transferred coursework and from CS 411, CS 421, CS 423, CS 457, CS 458, CS 461, CS 470, CS 493 or CS 494R can be used to satisfy degree requirements; these courses can not be identical to courses taken already for a prior degree and must be completed with a 3.0 or higher GPA for each course used. Other 300- and 400-level courses do not count toward fulfillment of degree requirements;
- 5. No more than 3 hours of CS 597 (directed readings) can be used to satisfy degree requirements. All CS 597 courses to be applied to the master of science in computer science degree requirements must be approved by the SCE Master's Committee at least six weeks before classes begin;
- 6. No more than one course grade below 3.0 may be applied toward the degree requirements.

Transfer Credit

Not more than six hours of graduate credit may be transferred from another recognized graduate school or from another academic unit within UMKC. Transfer credit may be applied toward the master's degree requirements on the approval of the student's graduate adviser and the Master's Committee. No credit hours may be transferred when those hours have been used toward the completion of any other degree program, graduate or undergraduate. The total amount of transfer credit and credit from approved CS 400 level classes shall not exceed nine hours.

Academic Regulations

For smooth completion of the degree program, a student must follow various academic regulations as described below:

Starting the Program

When accepted into the program, the student's first contact is with the Computer Science principal graduate adviser or with members of the Graduate Committee during the orientation session. At this initial meeting, a review will be made of the student's status in the program and the student will be required to provide a tentative program of study within the first semester. Such a program should reflect the deficiency and prerequisite courses that have been prescribed and that may have to be taken prior to taking courses for graduate credit.

The most immediate concern will be the courses to be taken in the first semester. The principal graduate adviser will help the student select those initial courses.

Within the first semester, the student will be assigned a graduate adviser (faculty) who will then become the primary contact person for that student until a thesis adviser (for thesis option) is selected. The chair of the CSEE Graduate Committee or his/her designee will notify the student of the identity of the specific graduate adviser. It will be the responsibility of students, in conjunction with their advisers/chairs, to devise a program of study using the degree requirements worksheet and the course planning worksheet. This should be submitted to the Graduate Committee, usually by the end of the second semester. The CSEE Graduate Committee is in charge of handling procedural issues related to the M.S. program in computer science. Any request for exception to rules, regulations or policies should be directed to this committee.

Deficiences

The Graduate Committee reviews and evaluates all applications for admissions to the MS degrees. Frequently, they review applications from students whose past academic record show strong positive indications for success as a graduate student, yet have not satisfied all courses needed for full admission. The Committee may offer this student admission to the program on a conditional basis and compile a list of 'deficiency courses'. The successful completion of these courses with a grade of B or better will be a condition of full admission to the program. The student is then required to complete all such deficiencies as a contractual obligation at the earliest opportunity.

The committee creates this list based on the transcripts and syllabi submitted by the applicant. Yet, it is possible that applicants have indeed satisfied one or more of their listed deficiencies. In these cases, the student should contact their academic adviser as soon as possible in the first semester to initiate a petition to waive the deficiencies in question. The written petition with all the needed supporting documentation (such as course syllabus) attached, must be submitted no later than four weeks (two weeks for summer) before the end of the first semester of enrollment. The decision of the committee is final and can be one of three:

- The waiver is granted.
- The student is allowed to take an examination.
- The waiver is denied and the student must pass the class with a B (3.0) or higher.

The committee's decision is final, so it is important that students consult with their adviser to ensure that all the proper documentation supporting the waiver is submitted.

If the student is allowed to take the examination, it must take place no later than the second semester of enrollment. Deficiency examinations are offered once each semester and the date is announced six to eight weeks in advance. The student may take the exam only once. If the student does not perform satisfactorily on the exam, then the student must enroll in the course to satisfy the deficiency requirement.

All deficiencies shall be satisfied within three semesters of admission. If deficiencies are not satisfied within this time period, enrollment will be limited to deficiency courses until all deficiencies have been satisfied.

Note

Please note that there are graduate level courses that have an undergraduate course as prerequisite, and that not all undergraduate courses can be taken for graduate credit.

Program of Study

A graduate degree indicates mastery of a coherent program in a chosen field and the ability to engage in creative projects in that specialty. The program of study is vital in assuring the completion of a formal program of study designed to ensure the mastery of specified knowledge and skills.

Forms for the program of study specification may be obtained from the graduate officer or the CSEE Division Office. It is required that the program be approved by the student's graduate adviser and the Graduate Committe Chair in the semester in which the student will complete 12 credit hours toward the degree, which is usually during the second semester of enrollment. It is then forwarded to the Graduate Officer for further approval and handling.

Once a program of study has been approved, it is the student's responsibility to ensure that all curricular requirements and prerequisites are satisfied. If a change in the approved program is needed, a petition must be submitted to the student's adviser who forwards it to the Graduate Committee for approval. It is not expected that more than four courses will change from the original program of study. If more than four courses are changed, then a new program of study should be filed.

Academic Loads

A graduate student enrolled in the fall or winter semester in 9 or more credit hours is considered full time. A graduate student enrolled in the summer semester in 5 or more credit hours is considered full-time. Any student enrolled in less than the above number of hours is considered part-time. A student who is enrolled for six credit hours during a regular semester may be considered full-time if the student has at least a quarter-time graduate research/teaching assistantship. A student's academic load may be restricted as deemed fit by the student's graduate adviser or the CSEE Master's Committee.

International students will be required to take an English Proficiency Test administered by the International Student Affairs Office. Performance on the test may result in recommendations that the student undertake one or more English language courses during the first semester. It is strongly recommended that the student abide by those recommendations.

Students holding graduate teaching assistantships and graduate research assistantships should take a minimum of 6 credit hours during each of the fall and winter semesters and a minimum of three credit hours during the summer session. However, GTA/GRAs who have completed all coursework and who are working on research need only to enroll in one credit hour. International students must abide by the requirements of the U.S. Immigration Service and should consult the International Student Affairs Office regarding this matter.

Enrollment Policies

To remain in good standing, the student must enroll for at least one semester during each calendar year until all the courses in the program of study are completed. After this time, the student must be continuously enrolled each fall and winter semester until the degree is awarded. The student must be enrolled in the semester in which the degree will be received. Students working as graduate assistants during the summer must be enrolled during the summer semester. Failure to follow the above policies will result in a need to apply for new admission to the program under the degree requirements in effect at the time of re-admission.

Academic Standing

The student must maintain at least a 3.0 grade-point average (GPA) every semester. Deficiency courses, if any, must be passed with a B (3.0) or higher. A 400-level course in which the student receives a grade lower than B (3.0) shall not be used to satisfy the degree requirements. Similarly, a 500/600-level course in which the student receives a grade lower than C (2.0) shall not be used to satisfy the degree requirements. However, all grades for courses taken for graduate credit shall be used in the calculation of the current GPA. No more than one grade below B(3.0) in a course taken for graduate credit shall be applied toward the degree. If a student receives three grades below B (3.0) in courses taken for graduate credit or taken to fullfil a deficiency requirement, or if a student receives a grade below D (1.0) in a course taken for graduate credit or taken to fullfil a deficiency requirement, then this student will be ineligible to enroll.

Petitions

Any exception to academic policy and regulations or to the degree requirements (e.g. deficiency waiver) must be requested through a written petition. The petition form is available from the CSEE Division Office and on the web; the completed petition that includes an explanation for the petition should be submitted to the CSEE Division Office. The degree program coordinator or his/her designee will review such petitions and will coomunicate the result to the student. It is important that the petition include any necessary documents as attachments for a timely decision.

Ineligibility

Ineligible students may petition the CSEE Graduate Committee to be re-enrolled. Such petitions will be reviewed by the Graduate Committee, whose ruling is final. An ineligible student will only be approved for further graduate study under the terms of a restrictive probation taking the form of a written contract between the student and the CSEE Division. The CSEE Division may render a student ineligible regardless of the student's grade-point average. Such procedures are rare, and will involve a recommendation to the dean of the School of Graduate Studies.

Auditing a Course

A graduate student should not take a course for audit if that student plans to take the course for credit. Once a course has been audited by a student, that student cannot take the course for credit later in the program.

A graduate student cannot change a course to audit after the eighth week of the winter and fall semesters or after the fourth week of the summer semester. Changes to audit status must have the permission of the course instructor as well as be within the allowable period.

Directed Reading Courses

Up to 3 hours of CS 597 Directed Readings is allowed towards

a Master of Science. Such a course must be approved in advance (i.e., before the student takes the course) by the students committee and the Graduate Committee. The following information must be furnished:

- Title of the course
- Detailed syllabus for the course
- Textbook and references
- The manner in which the course will be conducted (i.e. meetings, assignments, etc.)
- The manner in which the students are assessed (i.e. how many exams, presentations, reports, etc.)
- The course which it replaces, if appropriate
- Name(s) of the instructor(s)
- Name(s) of the student(s)
- Reasons for offering this course in a directed readings format

Thesis Option

Master's degree candidates in computer science who decide to do the thesis option are required to demonstrate knowledge and maturity in the discipline by completing at least three hours of Computer Science 599 - Research and Thesis. Students may enroll in more than three hours of Computer Science 599; however, only three hours may be applied toward the degree. The research program will be defined by the student in conjunction with the student's thesis committee. Under the direction of the thesis adviser, the student will investigate a topic of current interest in computer science and prepare a master's thesis on that topic.

The final requirement for conferral of the M.S. degree is defense of the thesis, where the supervisory committee is the examining body. The thesis must be submitted in complete typewritten form to the adviser and supervisory committee at least six weeks before the date the advanced degree is to be conferred. Also, the supervisory committee must have access to the thesis at least one week before the date of the defense. Students must comply with all rules and regulations governing theses outlined in the general catalog under General Graduate Academic Regulations and Information.

Master of Science in Electrical Engineering

The University of Missouri-Kansas City has created an exciting and uniquely designed program of graduate study leading to the Master of Science in Electrical Engineering. This degree offers two options: thesis or non-thesis. In the latter, it provides the student opportunities to study areas such as wireless communications, signal processing, computer architectures, digital systems, and computer networking. In the thesis option, the student has the opportunity to engage in research that builds upon this coursework to reach the forefront in the chosen area. This degree prepares graduates for the widest variety of future opportunities possible, whether it be in corporate research, product development, management or entrepreneurial endeavors. It also prepares graduates for future studies in Doctor of Philosophy programs. The overall goal is to put graduates into a position to be leading technology developers and innovators. (Contact info: (816) 235-1193, sce@umkc.edu).

Admission Requirement

Applicants for Masters level graduate studies in Electrical and Computer Engineering should have a grade-point average (GPA) of at least 3.0 on a 4.0 scale for the last 60 semester hours of relevant undergraduate coursework in electrical engineering and/or computer engineering. However, if that GPA is below 3.0 but more than 2.75, and if other indicators promise success in the program, rules may still allow probationary admission. The department will notify the applicant by letter after careful examination of the admissions file.

The following documents are required for admission consideration:

- 1. Application for admission.
- 2. Official transcripts of all college coursework.
- 3. Graduate Engineering supplemental application.
- 4. Official results of the Graduate Record Exam (GRE) general test. The applicant must score at the 80th percentile for the quantitative portion.
- 5. (For international students only) A minimum test score of TOEFL 550/ CBT 213 is needed. International students must also place in the top 25% of his or her graduating class.
- 6. Three letters of recommendation for students with a GPA less than 3.0 for the last 60 hours of undergraduate work.

Note: High GRE verbal and quantitative scores and strong letters of recommendation may compensate for lower TOEFL scores and GPAs.

Acceptance or Denial

After thoroughly considering an applicants record, one of the following actions will be taken:

Normal Acceptance

The student is accepted unconditionally.

Normal Acceptance with Pre-program Requirements This category applies to an otherwise qualified applicant who has a Bachelor of Science degree from an approved program, but not in Electrical Engineering, Computer Engineering, or a similarly named Engineering discipline. The student will be notified in writing of any make-up requirements specified by

the Masters Committee. Probationary Acceptance

Applicants with marginal credentials may be admitted conditionally. They will have to receive a B or better in each course in the first 12 hours of graduate coursework. In addition, make-up requirements may be set forth by the Masters Committee.

Non-Acceptance

The student is not admitted. The student will be notified in writing of the admission denial. The letter may specify under what conditions a future application would be more favorably considered.

Financial Assistance

A variety of financial awards are available to graduate students. The most common awards for CSEE graduate students are Chancellor's non-resident awards and graduate teaching and graduate research assistantships, as explained below.

Graduate Teaching and Research Assistantships

There are a limited number of Teaching Assistantship positions available each semester. The actual number awarded each semester is based on enrollment. Typically, awards are for quarter-time or half-time support. Research assistantships might also be available from individual faculty members. These are usually supported by research grants/contracts and are usually not awarded to prospective students. Due to high enrollment in the masters program, getting any asssistantships in the first semester is usually difficult.

Chancellor's Non-Resident (CNR) Award

This award can be awarded to graduate students newly admitted to the Masters program. The award covers the non-resident portion of the UMKC educational fees. To receive this award, the student must be nominated by the MS admission committee to the University's Financial Aid and Scholarships office. The number of awards available varies each year. Awards are made for the fall semester only; however, a student given an award could delay his/her arrival until the following winter semester. This award is available to both non-residents of Missouri and international students. Since the number of awards is limited, this is a very competitive award which goes to our best applicants.

Advising

Initially, the student will be advised by the academic adviser assigned to them during the first semester of enrollment. In order to enroll in any course, the student must have the signature of the adviser.

In the semester that results in 12 hours of credit toward the master's degree, the student should decide between a thesis option and a non-thesis option. If the student decides on a non-thesis option, he should consult with his or her adviser. If the student decides on a thesis option, he or she should seek a thesis adviser, who then also becomes the academic adviser. The thesis adviser must be a full member of the graduate faculty and, in collaboration with the student, will then appoint two other graduate or associate graduate faculty members to be on the student's thesis/supervisory committee. This committee may consist of more than three members, but the majority of committee members must have full graduate faculty status.

Degree Requirement

To earn a Master of Science in Electrical Engineering, the student must satisfy any general degree requirements and complete coursework that fulfills the requirements according to the thesis or non-thesis option:

Requirements specific for thesis option

- 1. Complete a minimum of 6 hours ECE 599 Research;
- 2. Pass a final examination, which is an oral defense of the thesis;
- 3. Satisfy all common requirements (see below).

Requirements specific for non-thesis option

- 1. The following courses do not count toward this degree option: ECE 599, ECE 600, or ECE 690;
- 2. Satisfy all common requirements (see below).

Common requirements and limitations to both options, see also below.

- 1. At least 30 semester credit hours of 400-, 500-, or 600-level coursework, completed within the past six years;
- 2. At least 21 hours of 500/600-level coursework;
- 3. At least 24 hours of ECE course work, see also below;
- 4. At least one 3-hour course, at the 500/600-level, in each of three different study areas, with at least two of the areas in ECE; a list of courses and their associated study areas is provided in the Electrical and Computer Engineering Graduate Student Handbook;
- 5. Up to 3 hours of ECE 597 Directed Readings and ECE 697 Advanced Directed Readings, is allowed;
- 6. No more than six (6) credit hours of transferable graduate coursework from another institution or from other degree programs within UMKC, as approved by the students graduate faculty adviser;
- 7. The following courses can be used to satisfy degree requirements and can be counted as equivalent to ECE courses: CS 511, CS 513, CS 514, CS 517, CS 520, CS 522, and CS 594;

8. The courses ECE 493R and ECE 494R (or their equivalents) do not count for graduate credit.

The faculty provide research and emphasis area coursework in communication and information processing (signal and image processing, electro-optical systems, high energy lasers, and holography); computers and digital systems (computer arithmetic, computer architecture, and computer and digital systems); and wireless communications (system design, propagation modeling, antenna design, and wireless networking).

Starting the Program

When accepted into the program, the students first contact is with the Electrical Engineering principal graduate adviser. At this initial meeting, a review will be made of the students status in the program and the student will be required to provide a tentative program of study within the first semester. Such a program should reflect the prerequisite courses that have been prescribed and that may have to be taken prior to taking courses for graduate credit.

The most immediate concern will be the courses to be taken in the first semester. The principal graduate adviser will help the student select those initial courses. Within the first semester, the student will be assigned an academic adviser who will be the primary contact for the student until the student graduates under the non-thesis option. If the student decides to follow the thesis option, a thesis adviser will replace the academic adviser. In either case, it is the responsibility of the student to devise, after consultation with their advisers, a program of study using the degree requirements worksheet and the course planning worksheet. This should be submitted to the graduate officer, usually by the end of the second semester.

The Masters Committee is in charge of handling procedural issues related to the M.S. program in Electrical Engineering. Any request for exception to the rules should be handled as described below related to petitioning procedures.

Program of Study

A graduate degree indicates mastery of a coherent program in a chosen field and the ability to engage in creative projects in that specialty. The program of study is vital in assuring the completion of a formal program of study designed to ensure the mastery of specified knowledge and skills.

Forms for the program of study specification may be obtained from the graduate officer. It is required that the program be approved by the students graduate thesis adviser and filed by the graduate officer in the semester in which the student will complete 12 credit hours toward the degree. This is usually during the second semester of enrollment.

Once a program of study has been approved by the principal graduate adviser and filed with the graduate officer, it is the students responsibility to ensure that all curricular requirements and prerequisites are satisfied and changes in the program are submitted to the students thesis/supervisory committee via the thesis adviser for approval.

Any changes to the program of study must have the approval of the adviser, the thesis/supervisory committee and the principal graduate adviser. It is not expected that more than four courses will change from the original program of study. If more than four courses are changed, then a new program of study should be filed.

Academic Loads

A graduate student enrolled in the fall or winter semester in 9 or more credit hours is considered full-time. A graduate student enrolled in the summer semester in 5 or more credit hours is considered full-time. Any student enrolled in less than the above number of hours is considered part-time. A students academic load may be restricted as deemed fit by the students graduate adviser or the Masters Committee. International students will be required to take an English Proficiency Test administered by the International Student Affairs Office. Performance on the test may result in recommendations that the student undertake one or more English language courses during the first semester. It is strongly recommended that the student abide by those recommendations.

Students holding graduate teaching assistantships and graduate research assistantships should take a minimum of 6 credit hours during each of the fall and winter semesters, and a minimum of three credit hours during the summer session. However, GTA/GRAs who have completed all coursework and who are working on research need only to enroll in one credit hour. International students must abide by the requirements of the U.S. Immigration Service and should consult the International Student Affairs Office regarding this matter.

Enrollment Policies

To remain in good standing, the student must enroll for at least one semester during each calendar year until all the courses in the program of study are completed. After this time, the student must be continuously enrolled each fall and winter semester until the degree is awarded. The student must be enrolled in the semester in which the degree will be received. Students working as graduate assistants during the summer must be enrolled during the summer semester. Failure to follow the above policies will result in a need to apply for new admission to the program under the degree requirements in effect at the time of re-admission.

Academic Standing

The student must maintain at least a 3.0 grade-point average (GPA) every semester. Deficiency courses, if any, must be passed with a B (3.0) or higher. A 400-level course in which the student receives a grade lower than B (3.0) shall not be used to satisfy the degree requirements. Similarly, a 500/600-level course in which the student receives a grade lower than C (2.0) shall not be used to satisfy the degree requirements. However, all grades for courses taken for graduate credit shall be used in the calculation of the current GPA. No more than one grade below B(3.0) in a course taken for graduate credit shall be applied toward the degree. If a student receives three grades below B (3.0) in courses taken for graduate credit or taken to fullfil a deficiency requirement, or if a student receives a grade below D(1.0) in a course taken for graduate credit or taken to fullfil a deficiency requirement, then this student will be ineligible to enroll.

Petitions

Any exception to academic policy and regulations or to the degree requirements (e.g. deficiency waiver) must be requested through a written petition. The petition form is available from the CSEE Division Office and on the web; the completed petition that includes an explanation for the petition should be submitted to the CSEE Division Office. The degree program coordinator or his/her designee will review such petitions and will coomunicate the result to the student. It is important that the petition include any necessary documents as attachments for a timely decision.

Ineligibility

Ineligible students may petition the CSEE Graduate Committee to be re-enrolled. Such petitions will be reviewed by the Graduate Committee, whose ruling is final. An ineligible student will only be approved for further graduate study under the terms of a restrictive probation taking the form of a written contract between the student and the CSEE Division. The CSEE Division may render a student ineligible regardless of the student's grade-point average. Such procedures are rare, and will involve a recommendation to the dean of the School of Graduate Studies.

Auditing a Course

SCE graduate students should not take a course for audit if they plan to take the course for credit. Once a course has been audited by a student, that student cannot take the course for credit later in the program.

SCE graduate students cannot change a course to audit after the eighth week of the winter and fall semesters or after the fourth week of the summer semester. Changes to audit status must have the permission of the course instructor as well as be within the allowable period.

Directed Reading Courses

Up to 3 hours of ECE 597 Directed Readings and ECE 697 Advanced Directed Readings, is allowed towards the Master of Science in Electrical Engineering. Such a course must be approved in advance (i.e., before the student takes the course) by the students thesis/supervisory committee and the Graduate Committee. The following information must be furnished:

- Title of the course
- Detailed syllabus for the course
- Textbook and references
- The manner in which the course will be conducted (i.e. meetings, assignments, etc.)
- The manner in which the students are assessed (i.e. how many exams, presentations, reports, etc.)
- The course which it replaces, if appropriate
- Name(s) of the instructor(s)
- Name(s) of the student(s)
- Reasons for offering this course in a directed readings format

Thesis Option

The Comprehensive Final Examination is required of all candidates for the Master of Science degree under the thesis option. It is arranged by the Graduate Faculty Adviser. It is to be conducted prior to the deadline date established by the Graduate School for the semester of intended graduation. Prior to the date of the examination, each member of the committee is furnished a copy of the candidates final thesis for review and discussion at the time of the final examination.

If pursuing the thesis option, the thesis must be submitted in complete typewritten form to the adviser and supervisory committee at least six weeks before the date the advanced degree is to be conferred. Also, the supervisory committee must have access to the thesis at least one week before the date of the defense. Students must comply with all rules and regulations governing theses outlined in the general catalog under General Graduate Academic Regulations and Information.

Doctoral Studies in Computer Science or Electrical Engineering

The Division of Computer Science and Electrical Engineering also participates in the Interdisciplinary Ph.D. program of the University of Missouri-Kansas City. This program is administered through the School of Graduate Studies at the University of Missouri-Kansas City and requires a student to select both a coordinating discipline and a co-discipline. Students interested in pursuing a doctoral degree in computer science, electrical engineering, or similar areas, may select one from Computer Networking, Software Architecture, Telecommunication Networking, or Engineering as either coordinating or co-discipline when applying for admission into the Interdisciplinary Ph.D. program. Many students pursuing Interdisciplinary Ph.D. program in this program choose both coordinating and co-disciplines in our School of Computing and Engineering, but other disciplines can be taken as well. See the Interdisciplinary Ph.D. program information in the School of Graduate Studies section of this catalog for general and discipline-specific admission requirements and regulations for Interdisciplinary Ph.D. study with Computer Networking, Software Architecture, Telecommunication Networking or Engineering as one of the desired disciplines.

Financial Assistance

Graduate teaching assistantships and graduate research assistantships are available to prospective doctoral students, but are highly competitive. Currently, most full-time Ph.D. students in the CSEE Division are supported either as graduate teaching assistants or as graduate research assistants.

Doctoral students already in the program are eligible to apply for several fellowships available from the School of Graduate Studies. Please check with the School of Graduate Studies for additional information.

Computer Science Courses

510 Information Theory (3). Representation, transmission and transformation of information, information compression and protection, generation, storage, processing and transmission of information. (ECE 475) Prerequisite: BS in Computer Science, Engineering, or Mathematics.

511 Advanced Telecommunications Networks (3). Efficient source coding and channel coding techniques, principles of switching, digital transmission over microwave, copper and optical media, T-carrier and SONET systems, traffic consideration in telecommunications networks, network synchronization, control and management, ATM concepts. Prerequisite(s): CS 394 and CS 411.

513 Digital Cellular Communications (3). Principles of microwave communications, performance metrics, mobile communications and cellular topology, co-channel and adjacent channel interference, fading and shadowing, various types of diversity, TDMA, FDMA and CDMA and other techniques for channel assignment, cellular network architectures, design considerations, PCN concepts. Prerequisite CS 411.

514 Optical Networking (3). Components of optical networks such as OADM, OXC, optical switches, DWDM, and their functions and interactions. Design, analysis and routing over all-optical networks to include waveband, wavelength and lightpath routing. Prerequisite: CS411

515R Integrated Services Digital Networks (3). Fundamental concepts of integrated services digital networks (ISDN), evolution of ISDN, CCITT recommended ISDN standards, basic and primary rates, user access protocols, network signaling such as Signaling System 7, switching and transmission in ISDN, broad ISDN, legal and regulatory issues, future trends. Prerequisite: CS 411 and CS 421 or permission of instructor.

517 Digital Switching: Techniques and Architectures (3). Integration of transmission and switching, single and multistage switching principles, space and time division switching, conventional switch architectures such as 4ESS, integration of circuit and packet switching, ATM switching and design considerations, ATM switch architectures, evaluation and comparison, future trends. Prerequisite(s): CS 394 and CS 411.

520 Network Architecture I (3). Principles, protocols, and architectures of data networks, internetworking, routing, layering, and addressing, with specific investigation of the Internet Protocol (IP), Mobile IP, Multiprotocol Label Switching (MPLS), IP over Asynchronous Transfer Mode (ATM) networks, and virtual private networks. Prerequisite: CS 243, CS 420 or CS 421, CS 431.

521 Network Architecture II (3). Principles, protocols and architectural issues of computer networks for transport layer and above, with specific emphasis on TCP/IP for best-effort services as well as for emerging multi-media services. Prerequisite: CS520

522 Computer Network Design and Analysis (3). Topological design, capacity and flow assignment problem-modeling and algorithms, and their analysis, issues in network control. Prerequisite(s): CS 352, CS 394, CS 421.

524 Protocol Design (3). Protocols as formal algorithms, architectural definition, protocol specification languages and models and their translation to implementation languages, overview of verification methods, symbolic execution. Prerequisite: CS 421.

526 Network Routing (3). Algorithms, protocols and analysis for network routing. Routing in different networks such as circuit-switched networks, Internet, broadband networks, and transmission networks are covered. Prerequisites: CS520 and CS522.

528 Local Area Networks: Analysis and Design (3). Definition of local area networks (LAN), LAN architecture and protocols, topology, transmission media, channel access protocols, modeling, simulation and performance evaluation of LANs, considerations in design and implementation, examples. Prerequisite: CS 421 and 494.

531 Advanced Operating Systems (3). Components of an operating system, scheduling/routing mechanisms, process control blocks, design and test various operating system components. Prerequisite: CS 431.

532 Discrete Event Simulation (3). Review of statistical distributions, generation of pseudo- random variates and stochastic processes, basic queueing systems such as M/M/m and Jackson Networks, simulation project. Prerequisite: CS 594.

541 Advanced Programming Languages (3). Concurrency, non-determinism from the standpoint of programming languages, and applicative (functional) languages. Prerequisite: CS 441.

544 Programming Language Semantics (3). Formal semantics of programming languages, lambda calculus, operational, axiomatic and denotational semantics, proofs of program correctness. Prerequisite: CS 441.

551 Advanced Software Engineering (3). Current concepts in software architecture and design, comparative analysis for design, object-oriented software design, software quality criteria for evaluation of software design. Introduction to metrics, project management and managerial ethics. Prerequisite: CS 451.

552 Formal Software Specification (3). Formal modeling including specification and deviation of abstract data types, completeness issues in the design of data types and data structures, implementation of data structures from a formal data type specification, verification of abstract to concrete data mapping. Prerequisite(s): CS291 and CS 352.

554 Software Tools and Programming Environments (3). Taxonomy of software tools and environments, generic software tool architecture, interface techniques for users, intra-system and stand-alone systems, integration of heterogeneous systems components. Prerequisite: CS 451.

556 Human Factors in Computer Systems (3). Design of "user friendly" man-machine interface, survey of recent psychological studies in man-machine interaction, user interface design, instrumentation and testing, analytic models of man-machine interaction. Prerequisite: CS 451.

558 Software Engineering Economics (3). Software cost, schedule, and resource estimation, estimation models, Boehm's COCOMO model, DeMarco's "bluebook" estimation techniques. Prerequisite: CS 451.

560 Knowledge Discovery and Management (3). This course teaches students fundamental theory and practice in the field of knowledge discovery and management and also provides them with hands-on experience through application development. Prerequisites: CS551, and either CS461 or CS464 Offered: Every Winter

561 Advanced Artificial Intelligence (3). AI systems and their languages, implementations and applications, case studies of various expert systems, current research topics in AI, logic programming using PROLOG. Prerequisite: CS 461.

563 Natural Language Processing (3). Natural Language Processing is an in-depth course intended for graduate students in Computer Science, with particular importance to those students interested in A.I. The course will concentrate on the algorithms and structures required for the systematic processing of natural languages. The problems involved in the processing of a context-free language, a survey of existing processors. A substantial project will be undertaken to create a Natural Language Processor. Prerequisite: CS 461 or consent of instructor.

564 Inference Techniques and Knowledge Representation (3). Inference Techniques is an in-depth course of logic and automatic theorem proving, intended for Computer Science graduate students, with particular importance to those students interested in Artificial Intelligence. The main areas of study will be concerned with the principals and techniques used for automatic theorem proving. An overview of the representation of knowledge and logic, a detailed appreciation of theorem proving methods, and implementation techniques will be provided in the course. The course will provide background for further study in varying fields of A.I. Prerequisite: CS 461 or consent of instructor.

566 Introduction to Bioinformatics (3). This course introduces students to the field of Bioinformatics with a focus on understanding the motivation and computer science behind existing Bioinformatic resources, as well as learning the skills to design and implement new ideas. Offered: Every Fall Prerequisites: CS 352 and a course/background in Biology (Genomics or etaModels preferred.)

567 Machine Learning in Bioinformatics (3). This course introduces students to the field of Machine Learning algorithms that are used in Bioinformatics, illustrated by several examples of applications to various

problems. Offered: Every Winter Prerequisites: CS 352, CS394 and a course/background in Biology (Genomics or MetaModels preferred.)

570 Architecture of Database Management Systems (3). Covers in detail, architecture of centralized database systems, database processing, management of concurrent transactions, query processing, query optimization, data models, database recovery, datawarehousing, workflow, World Wide Web and Database performance, and reviews the architecture of some commercial centralized database systems. Prerequisites: CS470 and CS431, or consent of instructor.

572 Mobile Computing (3). This course covers in detail the architecture of mobile and wireless network. It discusses and develops reveland concepts and algorithms for building mobile database systems (MDS), which is necessary for managing information on the air and E-commerce. This course is offered once a year. Prerequisite: CS 570 Offered: Every Fall

575 Advanced Computer Graphics (3). Review of transformations, 3D viewing, curve fitting in 3D, generation of surfaces, hidden surface elimination, scan-line coherence, rigid solid representation, shading, color theory. Prerequisite: CS 475.

581 Parallel Computer Architecture I (3). Parallelism in computer architecture, pipelined processors, array processors and multi-processor systems, algorithms for SISD, SIMD, MISD and MIMD organizations, vectorization, pipelining algorithms. Prerequisite: CS 481.

590 Special Topics (1-3). Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

590BI Special Topics (1-3).

590KB Special Topics (1-3).

5900 Special Topics (1-3).

590X Special Topics (1-3). Prerequisite: CS411. Offered: ECE374k

591 Concurrency Models (3). Concurrency control constructs, P/V primitives, cobegin/coend, monitors, message transmission, rendezvous systems, underlying mathematics of concurrent systems, Petri Nets, liveness (deadlock), reachability, boundedness, invariants, system modeling. Prerequisite: CS 431 and 493.

592 Design and Analysis of Algorithms (3). Combinatorial analysis, searching and sorting, shortest path algorithms, spanning trees, search and traversal techniques, backtracking, branch and bound, heuristics, algebraic simplification and transformation. Prerequisite: CS 352.

593 Automata Theory (3). Formal models for computation and their applications, structure and algebraic properties of sequential machines, other automata. Prerequisite: CS 493.

594 Introduction to Queueing Theory (3). Review of statistics and probability, stochastic processes, Markov Processes, the basic Poisson process, equilibrium conditions, M/M/1 system with variations local and global balance in networks of queues, open and closed networks. Prerequisite: CS 494.

595 Mathematical Foundations of Computer Science (3). Study of the theory, and algorithmic techniques, of the fields of graph theory, combinatorics and number theory, as they relate to their application in the field of computer science. Prerequisite: CS 352 and CS 494, or Consent of Instructor.

596A Computer Security I: Cryptology (3). Study of theory, and algorithmic techniques, of the fields of number theory and cryptology, as they are applied in the general area of computer and network security. Prerequisites: CS291.

596B Computer Security II: Applications (3). Application of the algorithmic techniques learned in CS 596A to provide suitable security countermeasures to the variety of security threats across the spectrum of computing. Prerequisite: CS 596A.

597 Directed Readings (1-3). Readings in an area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

598 Research Seminar (1-3). Graduate research based on intensive readings from the current research literature under the direction of a faculty member. Arrangements must be made prior to registration.

599 Research and Thesis (1-6). A project investigation leading to a thesis, or written report under the direction of a faculty member. A prospectus must be accepted prior to registration.

622 Advanced Network Analysis (3). Design and analysis of data networks, comparative analysis of capacity and flow strategies, time-delay/cost trade offs, concentration and buffering in store and forward networks, random access techniques, pure, slotted and reservation type Aloha schemes, carrier sense multiple access. Prerequisite: CS 522.

623 Network Simulation and Modeling (3). Simulation and modeling of network topologies and protocols, evaluation of the physical layer, data-link layer, network layer routing algorithms, local and long-haul networks. Prerequisite: CS 522 and 532.

650 Design of Concurrent Software (3). Software architecture of multitasking and distributed software, design techniques, implementation techniques. Prerequisite: CS 581 and 591.

651 Distributed Computing for Software Systems (3). Formal descriptions of problems encountered in distributed computing for architecture. Parameters to formal requirements, operating system support, communications support, process synchronization, and system verification, distinctions between real time and concurrent time. The nature of life cycles, project organization and use of automated tools. Prerequisites: CS551, CS531 OR CS570.

658 Object Oriented Testing Methods (3). Formal methods for the testing and verification of distributed object systems with emphasis on testing and verification of domain specifications and testing and verification with reusable frameworks. Prerequisite: CS551.

670 Architecture of Distributed Database Systems (3). Detailed study of distributed database systems architecture, in-depth study of distributed transaction management, distributed concurrency control and recovery algorithms, database distribution, distributed query optimization and analysis of database system design, and intelligent network databases. Prerequisites: CS570 or consent of instructor.

690 Advanced Special Topics (1-3). A lecture course presenting advanced research level topics. Prerequisite: Ph.D candidacy or consent of instructor. On demand. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

690CN Advanced Special Topics (1-3). A lecture course presenting advanced research level topics. Prerequisite: Ph.D candidacy or consent of instructor. On demand. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

690SA Advanced Special Topics (1-3). A lecture course presenting advanced research level topics. Prerequisite: Ph.D candidacy or consent of instructor. On demand. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

690T Advanced Special Topics (1-3). A lecture course presenting advanced research level topics. Prerequisite: Ph.D candidacy or consent of instructor. On demand. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

694 Advanced Queueing Theory (3). Non-Markovian systems such as M/G/1, G/M/1 and G/G/1, solutions of networks of non-Markovian nodes, queueing network approximate solution techniques. Prerequisite: CS 594.

697 Directed Readings (1-3). Readings in an area selected by the doctoral student in consultation with a doctoral faculty member. Arrangements must be made prior to registration.

698 Advanced Research Seminar (1-3). Advanced research by a group of doctoral students based on intensive readings from the current research literature under the direction of one or more doctoral faculty. Original research results of each student are exchanged by presentations and group discussion. Arrangements must be made prior to registration.

699A Research and Dissertation Research in Computer Science (1-12). Doctoral research in computer science.

899 Required Grad Enrollment (1).

Electrical and Computer Engineering Courses

512 Microwave Remote Sensing (3). Basic principles of remote sensing including scattering, absorption, transmission, and reflection of microwave energy. Basic radiative transfer theory. Microwave remote sensing systems including altimeters, scatterometers, radiometers, & synthetic-aperture systems. Principle applications of remote sensing systems including imaging, atmospheric sounding, oceanographic monitoring, ice-sheet dynamics, etc. Prerequisite: ECE 414.

514 Introduction to Fourier Optics (3). Diffraction lenses, and coherence treated in terms of systems and transforms, concepts with applications; two-and three-dimensional signals, Fourier and Hankel transforms, random signals, diffraction, and holography. Prerequisite: ECE 414 or instructor's consent.

516 Computer Networks (3). Concepts and goals of computer networking, structure of computer networks, OSI model and layers, network control, analysis, design and management, data communication techniques including fiber optics, WAN, MAN and LAN architecture and protocols, internetworking, case studies and hand-on studying the performance by analytic modeling and computer simulation. Prerequisite: ECE 424 or instructor's consent.

528 Digital Hardware Systems Design (3). Characteristics and parameters of various hardware subsystem including main memory, auxiliary memory, arithmetic units, card equipment, etc., and principles of organization into efficient system. Prerequisite: ECE 428.

530 Digital Electronics (3). Electronic hardware aspects of digital systems. Includes state-of-the-art information on integrated-circuit logic devices and their applications. Prerequisite: ECE 435 or instructor's consent.

532 Biomedical Instrumentation (3). Biomedical objectives, physical and engineering principles; optimal equipment design and actual performance of biomedical instrumentation; considers practical instrumentation problem solutions and unsolved problems. Prerequisite: ECE 330 and instructor's consent.

536 Power Electronics II (3). Circuit concepts and analysis techniques for transistor switching regulators, thyristor choppers, transistor inverters, self-commutated thyristor investers and cycloconverters. Prerequisite: ECE 436.

543 Solid State Theory I (3). Principles of quantum and wave mechanics as applied to solid state; Bolzman and Fermi statistics; energy band theory of crystals; electrons, holes in semiconductors. Current flow in pn junctions, semiconductor devices.

544 State Variable Methods in Automatic Control (3). State variables for continuous and discrete-time dynamic control systems; controllability and observability; optimal control of linear systems. Prerequisite: ECE 358.

562 Advanced Electrical Machinery Theory (3). Electrical machinery fundamentals necessary for understanding advanced literature. Applications of symmetrical components to machinery analysis. Prerequisite: ECE 464 or equivalent.

566 Extra High Voltage Power Systems (3). Design and performance criteria for extra high voltage including insulation, apparatus, line and related system equipment. Prerequisites: ECE 466 and ECE 467, or equivalent.

568 Economics of Power Systems (3). Transmission loss formula coefficients, incremental costs and losses, economic scheduling of generation, and applications. Prerequisite: ECE 466 and ECE 467.

579 Digital Signal Processing in Telecommunications (3). Applications of digital signal processing in telecommunications systems; oversampling and quantization, Delta-Sigma modulation, linear predictive speech coding, adaptive filtering, echo canceller, adaptive receivers and equalizers for wireless communication, digital cellular, CDMA. Prerequisites: ECE 474 and ECE 480.

580 Advanced Digital Signal Processing (3). Topics in digital signal analysis and filtering, including hardware implementation, speech synthesis and recognition, multi-dimensional transforms, random-signal concepts, design methods and computer aids to analysis and design. Prerequisite: ECE 480.

586 Pattern Recognition (3). Decision functions, distance measures, minimum distance classifiers, hard clustering methods, fuzzy clustering methods, statistical pattern recognition methods, Bayesian classifiers, error probabilities, estimation of density functions, perceptrons, least-mean-square algorithms, feature selection, dimensionality reduction and syntactic pattern recognition. Prerequisites: MATH 436, course in high-level programming language, some matrix theory and linear algebra or instructor's consent.

588 Communication Theory I (3). Generalized communication systems, signal processing, signals as random processes, optimum receivers. Prerequisite: A statistics course and ECE 478.

590 Special Topics in Electrrical and Computer Engineering (1-4).

590B Special Topics in Electrrical and Computer Engineering (1-4).

590C Special Topics in Electirical and Computer Engineering (1-4).

590IP Special Topics in Electirical and Computer Engineering (1-4).

590NA Special Topics in Electrical and Computer Engineering (1-4).

590NR Special Topics in Electirical and Computer Engineering (1-4).

590ON Special Topics in Electrical and Computer Engineering (1-4).

594 Probability and Stochastic Processing for Engineering (3). Introduction to probability, multidimensional complex phaser random variables and stochastic processes in electrical engineering. Prerequisites: ECE 482, ECE 414 and ECE 514.

599 Research (1-6). Independent investigation in field of electrical engineering to be presented in the form of a thesis.

600 Problems (2-5). Supervised investigation in electrical engineering to be presented in form of report.

602 Magnetogasdynamics (3). Flow of electrically conducting fluids in the presence of applied electromagnetic field.

604 High Frequency Transmission and Radiation (3). Skin effect; theory of transmission lines, wave guides, resonators.

606 Electromagnetic Scattering and Antenna Theory (3). Dyadic analysis; integral equations and Green's functions; field theorems-uniqueness, induction equivalence, reciprocity; image and Babinet's Principles; applications to antennas; method of stationary phase and applications to aperture antennas; array antennas and mutual coupling analysis; method of moments; asymptotic

techniques and applications to EM scattering from wedges, sylinders, and spheres; RF propogation path loss modeling and conformal antennas. Prerequisite: ECE 412 is required and Physics 500 is recommended.

616 Parallel and Distributed Processing (3). Covers the fundamental issues involved in designing and writing programs for simultaneous execution. Semaphores and monitor constructs are covered to provide a basis for critical section programming. Expansion of these concepts provide a basis for the analysis and design of control systems for multiprocessor devices and computer networks. Prerequisites: A suitable systems programming course or instructors consent.

617 Neural Network Based Computing System (3). The course will consider computing systems based on neural networks and learning models, along with implementations and applications of such systems. Prerequisite: Instructor's consent.

618 Artificial Intelligence (3). Concepts, theories, and models pertaining to neural nets, pattern recognition, learning systems, and programmed problem solving. Prerequisite: Instructor's consent.

619 Theory of Automata (3). Sequential machines: Turing machines; deterministic and stochastic automata; applications of automata. Prerequisite: instructor's consent.

620 Interactive Computer Graphics (3). Survey of interactive graphics techniques and methodologies. Emphasizes computer graphics software.

621 Computer Simulation (3). Investigates various methods for solving differential equations toward the goal of using these methods to carry out dynamical simulations of physical systems. Both analog and digital computers utilized.

624 Digital Software Systems Design (3). Characteristics and parameters of various software subsystem including assemblers, compilers, utility programs, special programming packages, interpreters, and operating systems; and principles of organization into efficient systems. Prerequisite: ECE 524.

626 Functional Languages and Architecture (3). Describes functional languages (e.g., LISP and FP) and the architecture to execute these languages including LISP machines and data flow computers.

630 Quantum Electronics (3). Optical pumping of metastable quantum states, magnetic state inversion. Semiconductor junction electron injection. Optical cavities, induced emission and optical regeneration. Parametric amplification.

631 Superconductivity and its Applications (3). Phenomenology and theory of superconductivity, cryogenic practice, metallurgy of superconducting elements, alloys and compounds. Present and prospective applications.

640 Semiconductor Device Theory (3). Energy band structure of semiconductors; influence of an electric and magnetic field on holes and electrons in a solid; conductivity of solids; nonequilibrium carrier densities; transport of excess carrier densities; interface studies. Prerequisite: ECE 643.

642 Advanced Integrated Circuits (3). Fundamentals of advanced integrated circuit design; diffusion, ion implantation and epitaxy; MOS and bipolar techniques; survey of current LSI design, fabrication and testing.

643 Solid State Theory II (3). Fundamentals of crystallography; application of X-ray analysis to the study of crystallinity. Quantum mechanical solution for the wave function of an electron in a solid; concepts of reciprocal space. Prerequisite: ECE 543.

644 Liapunov and Related Nonlinear Methods in Automatic Control (3). A study of nonlinear methods in automatic control including phase plane analysis, describing function techniques, basic definitions and theorems of Liapunov, methods of generating Liapunov functions, applications of Liapunov's methods, and Popov's methods. Prerequisite: ECE 544.

645 Optimal Control Theory (3). Analysis and design of dynamic systems using optimal control theory parameter optimization, dynamic optimization, computational methods, differential games. Prerequisite: ECE 544.

646 Stochastic Optimal Estimation and Control (3). Surveys random process theory; stochastic control and optimization; estimation and filtering based on Kalman-Bucy techniques; stochastic stability; adaptive and learning control systems. Prerequisite: ECE 544.

660 Power-Systems Stability (3). Performance of synchronous machines under transient conditions, power system stability, system fault computations using symmetrical components; computer solutions of power system problems.

661 Solid State Energy Conversion (3). Solid state direct energy conversion; and design of thermoelectric generators and heat pumps.

662 Power Electronic Drives (3). Advanced study of dc and ac motor drives controlled by power electronic methods, including phase controlled rectifier de chopper, cycloconvertyer, variable frequency inverters. Prerequisite: ECE 536 or consent of instructor. Recommended: ECE 544 and ECE 562.

664 Lightning and Switching Surges in Power Systems (3). Overvoltage, switching surge and lightning effects of a power system. Use of grounding and

lightning arresters. Effects of surges off and on machines. Prerequisites: ECE 466 and ECE 467, or equivalent.

668 Advanced Computer Methods in Power System Analysis (3). Power system matrices. Sparse matrix methods. Advanced load flow analysis techniques and concepts. Contingency analysis. State estimation. Prerequisites: ECE 466K and strong background in FORTRAN or C.

670 Direct Current Power Systems (3). Characteristic and performance analysis of DC transmission lines and associated conversion systems.

672 Power Systems Relaying (3). Theory of relaying systems for power system protection, improvement of power system stability. Relay coordination; performance of relays during transient swings and out-of-step conditions. Prerequisite: ECE 466.

674 Machine Intelligence (3). Formal languages in relation to natural language processing; formal languages, graphs, and image processing; formal logic and automated theorem proving; natural language processing; aspects of problem solving and heuristic programming.

675 Introduction to the Modeling and Management of Uncertainty (3). Theoretical and practical issues in the modeling and management of uncertainty. Topics include probabilistic uncertainty, belief theory and fuzzy set theory. Applications to computer vision, pattern recognition and expert systems.

676 Advanced Electric Circuit Analysis (3). Specialized study of mathematical analysis as applied to solutions of circuit networks with fixed and variable parameters.

677 Network Synthesis (3). Surveys linear active and nonreciprocal circuit elements, realizability conditions, methods for synthesizing active networks, and practical applications. Prerequisite: ECE 676.

678 Linear Graphs and Electrical Networks (3). Specialized study of linear graph theory as applied to electrical networks. Prerequisite: ECE 676 or equivalent.

679 N-Port Networks Synthesis (3). Synthesis of N-port networks including realizability conditions and synthesis conditions. Prerequisite: ECE 677 or equivalent.

680 Digital and Sample-Data Systems (3). Introduces sampling and quantization, design of digital and sample-data systems, digital filters, adaptive sampling and quantization. Prerequisite: ECE 480.

681 Applications of Transforms (3). Applications of Laplace and other transform methods of solution of circuit and field problems.

682 Coding Theory II (3). Further study of error-correcting codes; ring and cyclic codes, linear switching circuits, burst error codes, codes for arithmetic units, etc. Prerequisite: ECE 579.

684 Computer Vision (3). Image processing methods for segmentation, object representation, scene description and scene interpretation. Prerequisite: ECE 484 or consent of instructor.

688 Communication Theory II (3). Probability theory of analog and digital communication in the presence of random process noise. Encoding systems, detection systems, optimum receivers. Prerequisite: 472.

690 Advanced Topics in Electrical and Computer Engineering (1-4).

697 Problems (2-5). Supervised investigation in electrical engineering to be presented in form of report.

698 Seminar (1). Reviews of recent investigations, projects of major importance Prerequisite: Graduate Standing.

699 Dissertation Research (1-9). Doctoral Dissertation

School of Dentistry

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Dean:

Michael J. Reed Associate Dean for Academic Affairs: Pamela R. Overman Assistant Deans: David M. Clark (Clinical Programs) Edgar J. Ellyson (Business Affairs) Harvey C. Eplee (Information Technology, Patient and Facilities Management) John W. Killip (Student Programs)

General Information

All statements in this section are announcements of present policies, requirements (admission and academic progress), curricula, fees and services. They are subject to change at any time without prior notice. They are not to be regarded as offers to contract.

History

The UMKC School of Dentistry traces its roots to 1881, when the Kansas City Dental College was founded as a department of the Kansas City Medical College. In 1919 the Kansas City Dental College merged with Western Dental College to form the Kansas City Western Dental College. It became the School of Dentistry of the University of Kansas City in 1941. In 1963 the school became the School of Dentistry at UMKC.

Continuous and distinguished service for more than 100 years has established the School of Dentistry as an important institution throughout the nation.

Over the years, the school's educational standards and opportunities have increased as the school has consistently demonstrated its ability to educate well-qualified dentists and dental hygienists to contribute to the improvement of dentistry. As an affirmation of this, the D.D.S., the graduate certificate programs: advanced education in general dentistry, periodontics, pediatric dentistry, oral and maxillofacial radiology, oral and maxillofacial surgery, endodontics, and orthodontics and dentofacial orthopedics, and the B.S. in dental hygiene are fully accredited by the Commission on Dental Accreditation of the American Dental Association.

The school is situated on the Hospital Hill campus, where Truman Medical Center, Children's Mercy Hospital and the UMKC schools of medicine and nursing are also located.

Goals

The School of Dentistry is a center for dental education, research and service. The goals of the school are to:

- Prepare graduates in dentistry and dental hygiene to deliver patient care with a scientific basis and a caring manner.
- Instill a professional and societal responsibility in all students that will prepare them to become community leaders and address the public need.

- Provide practitioners and educators with continuing education opportunities to learn recent advances in dentistry and related fields.
- Contribute to the advancement of dentistry through basic, applied and educational research.
- Provide advanced education programs in dental research, education, general dentistry and dental specialities.
- Be a resource in oral health care for the public and community leaders.

Facilities

Clinic

Occupies 16,000 square feet; 274 fully equipped dental operatories; approximately 100,000 patient visits per year; internal, full-service prescription laboratories. Each patient treatment cubicle is equiped with electronic treatment record computer terminals. The computer-based student/patient clinical record mangement system is central to the efficient operation of the dental clinic.

Classrooms

Three large lecture halls and thirteen smaller classrooms. Lecture halls are equipped with networked computers and modern projection systems.

Laboratories

Two dental preclinical simulation facilities with fully equipped working stations; an anatomical model laboratory.

Library

Part of the university-wide library system: approximately 25,000-volume collection; more than 380 periodical subscriptions; extensive reference services; instructional resource library, extensively equipped for independent study with a variety of audiovisual equipment and 29 networked computers; Postgraduate Dental Career Opportunity Center provides information on dental practices for sale, and those in need of associates, advanced educational programs, armed services opportunities, dental hygiene and dental educational opportunities.

Hospital Affiliations

Teaching relationships exist with Kansas City Veterans Affairs Hospital, Leavenworth Veterans Affairs Hospital, Children's Mercy Hospital, Saint Luke's Hospital, Truman Medical Center Hospital Hill, Truman Medical Center Lakewood, Baptist-Lutheran Medical Center, Richard Cabot Medical Clinic, Samuel Rodgers Community Health Center, Cabot Clinic and Swope Parkway Health Center.

Miscellaneous

The school also supports a full-service Biomedical Communication Department that contributes significantly to its educational and administrative missions. The Health Sciences Bookstore supplies all textbook, dental instrument, and supply needs of the student body and is housed within the dental school.

Research Programs

Research plays a prominent role in the School of Dentistry. The Interdisciplinary Ph.D. program, and the advanced dental and dental hygiene educational programs all have strong research components. The intent of these advanced programs is to expose the student to basic and translational research, and clinical application. Research and the scientific method are formal parts of the educational program of all Dental School students, contributing to their education, as well as serving to advance science and dentistry. Grants from external funding currently amount to more than \$8 million per year. Many of the researchers who have obtained these grants serve as mentors for dental students participating in the Dental Summer Scholars Program. In this selective program, a limited number of students gain an eight-week research experience in the mentor's area of research interest.

Outreach Programs

In keeping with its goal of developing in its students a sense of professional and societal responsibilities, and an awareness of community needs and problems, the school offers numerous outreach opportunities to students in all of its programs. Individuals associated with more than 30 community-based organizations, agencies or projects are provided oral health care by UMKC students and faculty. Representative of these are the Kansas City Free Health Clinic, Dental Care With A Heart program (dental care for homeless and/or economically needy persons), Northeast Missouri Area Health Education Center Dental Clinic, Theodosia, Mo., project (serving the underserved in rural settings), Special Olympics Oral Health Screening project (providing oral health assessments to mentally or developmentally disabled persons), and treatment of orphaned children each year in Arecibo, Venezuela.

Academic/Student Support Services

Academic Monitor

The academic monitor of the School of Dentistry conducts a comprehensive retention program which includes sessions to refine learning skills and to provide assistance in coursework, as needed. Supervised review sessions also are organized for lecture and laboratory sections of many courses.

An interceptive system of continuous academic monitoring is in effect. Students who may be experiencing academic difficulty during a term are identified and advised. This results in an individualized plan of action to overcome any deficiencies. In addition, personal counseling assistance is available to all students who state or demonstrate a need.

Office of Student Programs

The Dental School's Office of Student Programs is concerned with three primary areas of focus and responsibility:

- Admissions/recruitment;
- Student records;
- Student support services.

The majority of student services are provided by this office. In other cases, the student is referred to the appropriate University student affairs offices as is necessary. Student Support Services provide financial aid (initial assistance and referral), counseling services (initial assistance and referral), a housing file and referral, a part-time job file and referral, and other services.

The School of Dentistry also offers the services of a debt management counselor to its students and alumni, for guidance managing loan programs and general financial advising.

Financial Aid

Financial assistance is available from a number of sources, primarily those programs supported by federal legislation (such as the Federal Direct Loan programs and Health Professions Student Loan). Information on most financial aid programs available to School of Dentistry students may be found in the School of Dentistry section of the Financial Aid Charts at http://www.umkc.edu/finaid. Additional information may be gathered from either the Office of Student Programs at the School of Dentistry (816) 235-**2080**, or from the Financial Aid and Scholarships Office, 5115 Oak St., Kansas City, MO 64111-2499, (816) 235-**1154**. As a rule, the student should apply for aid as soon as possible after acceptance into the particular program of study.

Grading System

The grading and grade-point system used by all academic programs in the School of Dentistry is that defined by the

University. It is outlined in the General Graduate Academic Regulations and Information section of this catalog. The School of Dentistry does not use the + and - grading option, grades rendered are A, B, C, etc.

Incomplete Grades

An instructor may give an incomplete grade (I) to a student who, because of illness or other valid reasons beyond the student's control, has been unable to complete the work in a course. A student who receives an incomplete, and who subsequently does not elect to withdraw from the course, must complete the required work by a date specified by the instructor. Failure to complete required work by this date is cause for the incomplete to be changed to an F (failure without credit). This is exclusive of those courses that are considered directed individual studies, internships, special topics, practicums, and research and thesis courses.

An incomplete is appropriate when enough work in the course has been completed that the student can finish the remaining work without re-enrolling in the course in question or attending additional classes. Otherwise students should initiate withdrawal (but only with permission).

Students may not re-enroll in a course for which an incomplete remains on their records.

Degrees Offered

The School of Dentistry offers a four-year professional program leading to the doctor of dental surgery (D.D.S.) degree, and the bachelor of science degree in dental hygiene (B.S.). The School offers graduate programs leading to a master of science degree in oral biology or in dental hygiene education (M.S.), and graduate certificates in recognized dental clinical specialties or other dental disciplines.

In addition, the school participates in UMKC's Interdisciplinary Ph.D. program through the discipline of oral biology. Please refer to the School of Graduate Studies section of the catalog for information on admission criteria and degree requirements.

Four-Year Doctor of Dental Surgery Program

Admission Information

Any college student or graduate can apply for admission to the four-year doctor of dental surgery program. However, priority is given to Missouri residents in filling a targeted number of positions per class. The School also has contractual or other agreements with the states of Kansas, Arkansas, New Mexico and Hawaii to consider for acceptance qualified residents from those states.

Candidates may be considered for acceptance after successful completion of a minimum of 90 hours of college credit. After successful completion of a minimum of 120 hours of college credit, the accepted applicant will be eligible to enroll in the School of Dentistry. All candidates for this program are encouraged to complete a baccalaureate degree before entry. In fact, college degree-holders with a broad educational background are the preference of the Dental Student Admission Committee.

Admission is on a selective basis and requires more than meeting course or college-hour requirements. Factors considered in the selection process are the candidates' academic credentials, including Dental Admission Test (DAT) scores, letters of evaluation, personal interview, evidence of the subjective criteria identified in a later section, and all other information submitted by the candidates.

Those who want to apply for admission should apply online with the American Dental Education Association at www.adea.org. Candidates must submit applications no later than Dec. 1 of the year prior to desired enrollment. **Nov. 1 is** the preference deadline date. Approximately 100 candidates are admitted to the D.D.S. program annually.

Counseling by the School of Dentistry's admissions staff is available to those interested in applying for admission. It is advisable to seek this counseling either prior to entering college or early in the college program.

GPA/College Hour Minimums

The following are the Dental Student Admission Committee's guidelines for GPA/college semester credit hour/Dental Admission Test (DAT) minimums and preferences:

- Preference is given to candidates with 90 or more semester hours of college credit at the time of application with a science GPA of 3.40 or higher and/or a DAT academic average of 17 or higher - the overall GPA will be considered although it will not receive the same weight as the science GPA.
- A candidate with 90 or more semester hours of college credit at the time of application with a science GPA of 3.00 and a DAT academic average of 15 or higher can be considered for an interview the overall GPA will be considered although it will not receive the same weight as the science GPA.
- It should be noted that no more than 60 hours of college credit can be earned at a community college and preference will be given to candidates who complete the science prerequisites at a four-year institution.

A broad liberal education culminating in a bachelor's degree is strongly encouraged of applicants seeking admission into this program. Recent history indicates that admission of a candidate who does not have a B.S./B.A. degree or who likely will not have one at the time of enrollment in the D.D.S. program is rather rare.

Pre-Dental Course Requirements

There is no required college major for admission to the School of Dentistry. However, certain courses are required prior to entering:

Biology

A minimum of four semesters of biology with labs. In particular, we require general biology I, anatomy, physiology and cell biology. Other courses that have counterparts in the dental curriculum (i.e., histology, neuroscience, microbiology) are strongly recommended.

Chemistry

A minimum of 8-10 credit hours with labs in both general chemistry and organic chemistry. The organic chemistry requirement can be met with a 5-credit-hour terminal organic chemistry course that includes the aliphatic and aromatic series.

Physics

A minimum of 8-10 credit hours of physics with labs. One semester of college mathematics (college algebra or higher) may be substituted for one semester of physics.

English

A minimum of 6 credit hours of English composition. (Courses in speech are not acceptable as substitutes for English composition.)

Other

It is advantageous to have course credit in mathematics, formal logic, biochemistry, business, social/behavioral sciences (such as psychology), communication skills, computer science, the humanities and applied arts (such as sculpting, jewerly making, etc.).

Dental Admission Test

All dental school applicants must take the Dental Admission Test (DAT) that is administered by the American Dental Association. Though the DAT is given throughout the year by computer at designated testing centers, **the test must be taken prior to submitting the AADSAS application.**

DAT scores are based on a range of 1 to 30, with 17 generally being the national average. The Dental Student Admission Committee prefers that a candidate's DAT scores be at this level or higher to be considered for admission.

For more information or to request a DAT application, contact the School of Dentistry's Office of Student Programs at (816) 235-**2080** (local) or (800) 776-8652 (toll-free).

Personal Interview

A personal interview at the School of Dentistry is required of applicants completing the necessary college hours, grade-point average and DAT requirements. The interview is by invitation only, an applicant for admission may not request it.

Candidate Subjective Criteria

When considering candidates for possible admission, the UMKC School of Dentistry's Dental Student Admission Committee (DSAC) reviews the entire scope of information that is available on each applicant. For each candidate the sources of this information include the academic record (i.e., overall GPA, science GPA and last 30 semester credit hours GPA, Dental Admission Test scores), AADSAS essay, responses to items on the UMKC School of Dentistry's Application Survey, letters of reference, interview assessment, and any other information provided by the candidate (e.g., personal statement). Specifically, the committee will expect evidence of the following factors in making the difficult choices among candidates:

- Demonstrated investigation of the profession of dentistry. It is strongly suggested that candidates observe in a minimum of five different dental offices (the offices of general dentists and specialists) and acquire a minimum of 80-100 hours of dental office observation, preference is given to candidates who have worked in a dental office;
- 2. Evidence of social conscience and compassion (i.e., caring attitude, sensitivity to those in need, significant community activities). It is strongly suggested that this be active and ongoing participation in volunteer activities;
- 3. Indication of fundamental personal character (i.e., integrity, maturity, self-reliance, leadership skills);
- 4. Evidence of critical thinking and problem solving ability (e.g., performance in courses requiring this skill such as in laboratory segments, in formal logic or in research experiences);
- 5. Significant and sustained level of academic achievement based on full course loads with evidence of a broad science and liberal arts education (i.e., fine arts, business, mathematics, humanities, computer science, etc.);
- 6. Established effective interpersonal/communication skills (i.e., an ability to communicate orally and in writing, a capacity to listen, a personality conducive to forming personal and/or professional relationships, an involvement in a range of extracurricular activities, especially those in which significant leadership roles have been taken);
- 7. Demonstrated ability to balance full academic schedules with extracurricular involvement and/or employment (i.e., effective/efficient management of time).

Because the Dental School Admission Committee looks closely at information from all sources included in an applicant's file, it is in the candidate's best interest that this information is consistent among sources. This is especially true with information supplied directly by the candidate (i.e., AADSAS essay, UMKC School of Dentistry's Application Survey, interview and/or personal statement). You are strongly encouraged to review all written materials for consistency and accuracy before submission.

Finally, before developing these written materials, the candidate is strongly encouraged to honestly and critically assess himself/herself on all the qualities identified. Following this process, the candidate is urged to review drafts of these documents collectively (e.g., to check for completeness, accuracy and consistency) and to evaluate himself/herself comprehensively as if he/she were a member of the Dental Student Admission Committee. Where the candidate feels a question may arise from Committee review, the applicant is encouraged to address this in a personal statement/letter to the Committee.

Technical Standards

The dental degree signifies that the holder is a dentist who has received sufficient training in dental education to practice dentistry. It follows that graduates must have acquired and demonstrated the knowledge, skills and abilities to function in a broad variety of clinical situations and to render a wide spectrum of dental care.

While each application is reviewed individually, it is necessary that each candidate be able to observe and perform each task required by the curriculum of the school. Similarly, the school does not consider the waiver of required examinations a reasonable accommodation for individuals with learning disabilities. Learning disabled students, when appropriate, may be granted additional time on required examinations, be examined in separate testing facilities, or accommodated in other reasonable ways, but they will not be exempted from the requirement to take and pass such examinations. (Candidates with disabilities should contact the UMKC Disabled Student Services for information regarding definition and documentation of learning disabilities.)

Candidates for admission into the D.D.S. program must possess abilities and skills in the following areas to satisfactorily complete the curriculum:

Observation

Candidates must be able to accurately observe laboratory experiments, preclinical demonstrations, clinical laboratory procedures and patient-care activities.

Communication

Candidates must be able to communicate effectively and sensitively with patients and with all members of the health care team.

Motor

Candidates must have physical dexterity to master all aspect of patient care. They must be able to execute motor movements required to arrive at a diagnosis and treatment plan, and to provide patient care, including emergency treatment.

Intellectual-Conceptual, Integrative and Quantitative Abilities

A candidate must have intellectual-conceptual, integrative and quantitative abilities that include measurement, calculation, reasoning, analysis and synthesis. Problem solving, one of the critical skills demanded of dentists, requires all of these intellectual abilities. In addition, the candidate must be able to comprehend three-dimensional relationships and understand the spatial relationship of structures.

Emotional and Behavioral Attributes

In addition to these skills, candidates must possess the high moral and ethical standards demanded by dentists and must possess the capability required for full utilization of intellectual abilities, the exercise of good judgment, the prompt completion of responsibilities attendant to the diagnosis, treatment planning and care of patients, and the development of mature, sensitive and effective professional relationships with patients. Candidates must be able to cope with taxing workloads and to function effectively under stress. A candidate also must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties in the clinical problems of many patients. In addition, personal qualities such as compassion, integrity, concern for others, interpersonal skills, interest and motivation should be assessed during the admissions and education processes. Technological accommodation can be made for some inadequacies in certain areas, but a candidate must be able to perform in a reasonably independent manner.

Notification of Admission

Applications for admission are reviewed by the Dental Student Admission Committee. In accordance with the guidelines of the American Dental Education Association, no notification of the admission decision is made to a candidate before Dec. 1 of the academic year prior to that applicant's class graduation date.

Formal Notification

After a decision is reached on an application, notification of acceptance is made by mail. The applicant has 30 days from the date of an acceptance letter to make a required nonrefundable \$200 deposit. If notification of acceptance is made after Jan. 1, the candidate must submit the deposit within 15 days of the date of acceptance.

Several individuals are placed on an alternates list. In the event that a position becomes available, an applicant from this list is chosen to fill the vacancy.

Notification of alternate status will come by mail.

Notification of denial also is sent by mail. If applicants are interested in reapplying, they should make an appointment with a School of Dentistry director of admissions to discuss the reason for the denial. An explanation of the admission decision and advice will be offered to applicants to enhance their future applications.

Minority Recruitment Program

The School of Dentistry has an active recruitment program to encourage and assist qualified minority students, particularly those from under-represented groups in the dental profession, to pursue careers in dentistry. Native Americans, African Americans and Hispanics are strongly encouraged to seek admission to the school.

Reserved Admission Program

The Reserved Admission Program for the Doctor of Dental Surgery degree at the UMKC School of Dentistry enables highly motivated, ambitious, talented students to pursue their dream of becoming a dentist. Entry into the program is available to students from Missouri and Kansas who are nearing completion of their high school education or are in the early years of their undergraduate education.

This program is composed of three stages, with the first two requiring formal application and review. The first stage is acceptance as a Provisional Reserved Admission Program Student. This step may be accomplished as early as the May following graduation from high school. Provisional Reserved Admission Program Students apply for full Reserved Admission status mid-way through their undergraduate sophomore year, the second stage. Students with full admission into the Reserved Admission Program are assured a seat in the D.D.S. class matriculating in August following the completion of their undergraduate studies, provided they meet the criteria for maintaining their status. The third stage is matriculation at the School of Dentistry. For more information about this program or to request an application, contact the School of Dentistry's Office of Student Programs.

Special Services Because of Disability

Federal law prohibits UMKC and the School of Dentistry from making pre-admission inquiry about disabilities. Information regarding disabilities given voluntarily or received inadvertently will not adversely affect any admission decision. Any accepted applicant requiring special services because of disability should notify the School of Dentistry's Assistant Dean for Student Programs. This voluntary self-identification of disability allows the School of Dentistry to prepare appropriate support services to facilitate learning.

Curriculum (Four Year Program)

The school offers a four-year, eight-semester, two-summer-term curriculum leading to the doctor of dental surgery (D.D.S.) degree. This curriculum is designed to prepare graduates in dentistry to deliver patient care with a scientific basis and a caring manner. As such, it provides a sound background in the biomedical, behavioral and clinical sciences with an emphasis on comprehensive oral health care. Exposure to clinical dentistry in the first semester of the first year is a hallmark of this curriculum.

The first year of dental school focuses on instruction in the biomedical sciences that provide a foundation for clinical studies. The first-year student also studies dental behavioral sciences and introductory courses in oral diagnosis and dental restorative techniques in a pre-clinical setting. Early clinical exposure is further emphasized through clinic-based courses in both the first and the second semesters. Acquisition of basic diagnostic skills and background knowledge is a goal of the first year of the curriculum.

Biomedical science courses extend into the second year; however, the major thrust of the second year is devoted to pre-clinical technique coursework of increasing complexity. In the preclinical laboratory courses, students continue learning the fundamental procedures of dentistry: operative dentistry, prosthodontics (fixed and removable), and endodontics. Clinically, students are introduced to the basic essential skills needed in preventive periodontics. Classroom lecture sessions are also conducted in each of these areas of dentistry along with didactic courses in periodontics, oral diagnosis, oral radiology, and oral surgery.

The primary emphasis of the third year of the curriculum is the clinical practice of dentistry. The general clinic is organized into subunits called teams. Each team includes an established set of faculty and staff. Patients are assigned to students for total care, from diagnosis and treatment planning through procedures necessary for successful case completion. While the emphasis of the third and fourth years of the dental curriculum is gaining clinical experience, students also attend advanced classes in periodontics, prosthodontics, oral surgery, orthodontics, pediatric dentistry, operative dentistry and oral diagnosis/oral medicine.

The fourth year involves extensive clinical practice. There are a few seminar sessions and formal courses (e.g., practice administration), but the student's major responsibility is to perfect diagnostic, patient-management and technical-treatment skills and demonstrate competence in all the skills required by the faculty of the School of Dentistry. The competencies expected of a graduate are:

- Apply legal and ethical principles to the practice of dentistry.
- Provide empathetic care for all patients, including members of diverse and vulnerable populations.
- Monitor professional knowledge and practice outcomes to develop and implement a plan of professional improvement.

- Participate in improving the oral health of individuals, families, and groups in the community through diagnosis, treatment, and education.
- Perform a complete dental examination to arrive at a diagnosis of the patient's oral condition.
- Develop, present and implement an integrated treatment plan to address a patient's dental needs.
- Manage medical emergencies and complications that may occur during dental treatment.
- Manage patients with pain and anxiety by the use of non-pharmacological and pharmacological agents.
- Select and administer or prescribe pharmacological agents in the treatment of dental patients.
- Treat patients with periodontal conditions.
- Treat patients with endodontic conditions.
- Treat patients with oral surgical needs.
- Diagnose potential or actual malocclusions.
- Treat patients requiring restoration of single defective teeth.
- Treat patients with partial or complete edentulism.
- Treat patients with soft tissue lesions and oral manifestations of your systemic diseases.

An outline of the four-year curriculum by semester is given below.

First Year

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Fall Semester		Hours
BIO 203	Cell Biology	3.0
BMS 300	Human Gross Anatomy I	5.0
LSBIOC 304	Biochemistry and Nutrition	4.0
BMS 308	Histology I	2.5
DENT 306	Introduction to Ethics and	
	Professionalism	1.0
DENT 310C	Clinical Assisting	2.5
DENT 316	Dental Morphology I (Lec/Lab)	3.0
DENT 318	Dental Biomaterials Lecture	1.0
Total Hours		22.0

Winter Semester

winter Semester		Hours
BMS 301	Human Gross Anatomy II	5.0
LSPHYS 401	Physiology Lecture	5.0
DENT 305	Operative Dentistry I Lecture	1.0
DENT 305L	Operative Dentistry I Lab	2.0
DENT 314C	Introduction to Oral Diagnosis	3.0
DENT 317	Dental Occlusion (Lecture/Lab)	3.0
DENT 328	Introduction to Dental Literature	1.0
DENT 335	Applied Neuroscience	2.0
DENT 350	Histopathology (Lecture/Lab)	2.5
Total Hours		24.5

Second Year

Fall Semester		Hours
LSMCRB 4180	Microbiology	4.0
DENT 410	Operative Dentistry II Lecture	1.0
DENT 410L	Operative Dentistry II Lab	2.0
DENT 412	Anesthesiology I Lecture	1.0
DENT 414	Pathology I Lecture	4.0
DENT 416	Complete Removable	
	Prosthodontics I Lecture	1.0
DENT 416L	Complete Removable	
	Prosthodontics I Lab	2.0
DENT 422	Fixed Prosthodontics I Lecture	1.0
DENT 422L	Fixed Prosthodontics I Lab	2.0
DENT 426	Oral Radiology Lecture	2.0
DENT 430C	Preventive Periodontics	3.0
DENT 435	Endodontics I Lecture	1.0
DENT 436	Orthodontics: Growth	
	and Development	1.0
Total Hours	-	25.0

Winter Semester		Hours
DENT 312	Dental Behavioral Science I	2.0
DENT 411	Operative Dentistry III Lecture	1.0
DENT 415	Pathology II Lecture	3.0
DENT 417	Removable Partial Prosthodontics	3.0
DENT 420	Periodontics I and II	2.0
DENT 423	Fixed Prosthodontics Lecture	1.0
DENT 423L	Fixed Prosthodontics Lab	2.0
DENT 431	Pediatric Dentistry I	1.0
DENT 439	Medical Emergencies in the	
	Dental Office	1.0
DENT 440	Oral Surgery I Lecture	1.0
DENT 441C	Introduction to Clinical Dentistry	2.0
DENT 442	Endodontics II Lecture	1.0
DENT 442L	Endodontics II Lab	2.0
DENT 524	Principles of Medicine	
	and Physical Diagnosis	2.0
DENT 526	Orthodontics I Lecture	1.0
DENT 526L	Orthodontics I Lab	2.0
DENT 556	Radiographic Interpretation	0.5
Total Hours	- 1 1	27.5

Third Year

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Summer Term	Hours	
DENT 460C	Review of Pre-Clinical Dentistry	2.0
DENT 501C	Introduction to Comprehensive	
	Patient Care	8.0
Total Hours		10.0
Fall Semester	Hours	
DENT 424	Oral Diagnosis and Oral Medicine	2.0
DENT 502	Grand Rounds I	1.0
PHARM 507	Pharmacology Lecture	3.0
DENT 515	Periodontics III Lecture	1.0
DENT 521	Oral Surgery II Lecture	1.0
DENT 538	Orthodontics II	1.0
Clinic		9.0
Total Hours		18.0
Winter Semester	Hours	
DENT 522	Oral Surgery III Lecture	1.0
DENT 527	Therapeutics	2.0
DENT 527 DENT 534	Therapeutics Advanced Prosthodontics	2.0 1.0
DENT 534	Advanced Prosthodontics DX & Mgt./Orafacial Pain	1.0
DENT 534 DENT 559	Advanced Prosthodontics	$\begin{array}{c} 1.0\\ 1.0\end{array}$
DENT 534 DENT 559 DENT 595	Advanced Prosthodontics DX & Mgt./Orafacial Pain Implant Dentistry Grand Rounds II	$1.0 \\ 1.0 \\ 1.0$
DENT 534 DENT 559 DENT 595 DENT 602 DENT 633 DENT 634	Advanced Prosthodontics DX & Mgt./Orafacial Pain Implant Dentistry	$1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0$
DENT 534 DENT 559 DENT 595 DENT 602 DENT 633	Advanced Prosthodontics DX & Mgt./Orafacial Pain Implant Dentistry Grand Rounds II Community Dentistry	$1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0$
DENT 534 DENT 559 DENT 595 DENT 602 DENT 633 DENT 634	Advanced Prosthodontics DX & Mgt./Orafacial Pain Implant Dentistry Grand Rounds II Community Dentistry	$ \begin{array}{c} 1.0\\ 1.0\\ 1.0\\ 1.0\\ 1.0\\ 1.0\\ 1.0\\ \end{array} $

Summer Term	Hours	
DENT 429	Behavioral Science II	1.0
DENT 537	Oral Oncology	0.5
DENT 650	Applied Ethics	0.5
Clinic	**	9.0
Total Hours		11.0
Fall Semester		Hours
DENT 514	Pathology III Lecture	1.0
DENT 519	Advanced Dental Materials	0.5
DENT 584	Case Presentation	0.5
DENT 603	Grand Rounds III	1.0
DENT 610	Anxiety/Pain Control in Dentistry	1.0
DENT 613	Periodontal Treatment Planning	1.0
DENT 617	Pediatric Dentistry Seminar	0.5
DENT 630	Practice Administration I Lecture	1.0
DENT 635	Community-Based Education II	1.0
DENT 680	Dental Occlusion IV	0.5
Clinic		10.0
Total Hours		18.0

Winter Semester Hours **DENT 600** Review of Clinical Dentistry 1.0 **DENT 604** Grand Rounds IV 1.0 Review of Clinical Dentistry II **DENT 605** 1.0 Dentistry for the Special Patient **DENT 614** 2.0**DENT 618** Dental Jurisprudence and Ethics 1.0 **DENT 631** Practice Administration II Lecture 1.0 Clinic 16.0**Total Hours** 24.0

Academic Standards

Professional education in the health sciences manifests characteristics that are distinct from other advanced educational programs. Academic standards of the School of Dentistry are established to ensure that the public, whose health will be entrusted to graduates of the Schools programs, will receive care of professionally acceptable quality and that the care will be provided in an ethical and professional manner. The School's academic requirements are described in the following two sets of standards, one for scholarly achievement and one for professional growth and development.

Standards of Scholarship

- 1. Pre-doctoral dental and pre-baccalaureate dental hygiene students must maintain at least a 2.5 GPA each semester in dental school. Failure to attain a 2.5 GPA in any semester will result in the students being placed on probation for the next semester. All students who are placed on probation must review their academic progress with the chair of the Academic Standards Committee. A second consecutive semester with a GPA below 2.5 will result in dismissal from the School. A total of three semesters with GPAs below 2.5 will result in dismissal from the School. For a semester to count toward removing students from probation, they must be enrolled full-time (at least 5 hours in Summer or 12 hours in Fall or Winter semesters).
- 2. Failure of any course (receiving a grade of F or No Credit) will necessitate additional work to remove or replace the F or No Credit. The course may be repeated at another dental school or dental hygiene program, with the approval of the associate dean for academic affairs, or during the next offering of the course at this school. Students will receive whatever grade they earn in the repeated courses and both grades will appear on their transcript and be included in the grade-point average. Students who fail only one course in a given semester may petition the course instructor for a remediation program if their failure was the result of performance slightly below acceptable standard (e.g., 60 percent where 65 percent is required for passing, or poor performance on one section of the course with acceptable performance in other sections). Any remediation program can take whatever form the course instructor deems appropriate. Possible examples:
 - Independent study for a number of weeks followed by an examination;
 - Remedial summer laboratory work followed by a laboratory examination;
 - A series of written exercises followed by an examination.

If students successfully complete a remediation program, their grades of F or No Credit will be changed to grades of D or Credit.

3. Any student who fails a course will be required to present for the Academic Standards Committee an approved altered curriculum plan that includes the completion of this course for the Committee's approval. An approved altered curriculum plan may result in an extension of the academic program because the student has demonstrated difficulty in dealing with the standard curriculum and may need additional coursework, review and/or supplemental instruction to successfully complete the curriculum.

Standards of Professional Growth and Development

- 1. Dental and dental hygiene students must achieve and consistently demonstrate acceptable levels of personal hygiene and dress.
- 2. Dental and dental hygiene students must achieve and consistently demonstrate concern for patients, peers, and others. Dental and dental hygiene health care providers have a duty to ensure:
 - (a) That patients are treated according to their desires and must be included in treatment decisions.
 - (b) Patient confidentiality in the entire range of the provider-patient relationship which includes dental records.
 - (c) That no harm or potential harm is done to the patient either through intent, ignorance, lack of preparation for the patient encounter, lack of skill, personal impairment of any kind.
 - (d) That no patient is abandoned which is defined as discontinuance of care without just cause and without giving the patient adequate notice and the opportunity to obtain the services of another provider.
 - (e) That the patients welfare (i.e. the provision of competent and timely delivery of dental care within the bounds of clinical circumstances as presented by the patient such as needs, desires and values) is paramount and takes precedence above all else. This also includes the obligation to: 1) identify and report perioral signs of abuse and neglect and to consult with faculty to report suspected cases to proper authorities as required by law; and, 2) report instances of faulty treatment whether intentional or not, to the appropriate faculty member.
 - (f) That all people including patients, staff, faculty and all other individuals are treated fairly, respectfully, and without prejudice.
 - (g) All standards and requirements of patient care established by the School of Dentistry are followed.
- 3. Dental and dental hygiene students behavior must exemplify the highest moral and ethical standards. The following represent conduct that is incompatible with these standards:
 - (a) Any behavior that tends to gain an unfair advantage for any student in an academic matter. This includes, but is not necessarily limited to, the following guidelines:
 - No student shall during an examination have, use, or solicit any unauthorized information or material (written or oral), copy from another students paper or discuss the examination with any other person.
 - No student shall during an examination knowingly give any unauthorized aid to another student.
 - No student shall acquire by any means knowledge of the contents of an examination yet to be given.
 - No student shall fraudulently claim for credit any classroom, clinical, laboratory, or other procedure or assignment performed by an unauthorized person, including a fellow student.

- (b) Anyone who has reasonable cause to believe that a student has acted unethically is obligated to bring the matter to the attention of the assistant dean for student programs or his/her designee who will follow the process identified in the Preliminary Procedures section of the UMKC School of Dentistry Honor Council Due Process Procedures for Violations of the Standards of Professional Conduct, to determine whether there has been a violation and whether charges should be brought.
- 4. Serious deficiencies in conduct as listed in the School of Dentistry Standards of Professional Conduct, or as outlined in Section 200.010, Standards of Conduct, of the University of Missouri Collected Rules and Regulations, by a dental or dental hygiene student shall be reported to the assistant dean for student programs or his/her representative, who will initiate the process as listed under "Preliminary Procedures."

Requirements for Awarding the D.D.S. Degree

Satisfactory completion of the program including:

- 1. Demonstration of competencies expected of a graduating student;
- 2. A passing grade on all sections of Part I and Part II of the National Board Dental Examinations;
- 3. A cumulative grade-point average of 2.5 or higher for the student's period as a dental student;
- 4. A demonstrated ability to meet the standards for professional growth and development.

Cost Estimates

The estimated cost (exclusive of living costs) for the four-year D.D.S. curriculum at the School of Dentistry is \$100,121. The amount is based on fees established and costs existing at the time of printing. This is itemized by type of expense and by year.

Note: Educational fees and books/equipment costs are subject to change without notice.

First Year (Fall and Winter semesters)

Books, Equipment and Supplies	\$4,810
Educational Fees (Resident)	18,765
First-Year Total Second Year (Fall and Winter semesters)	\$23,115
Books, Equipment and Supplies	\$7,015
Educational Fees (Resident)	18,765
Second-Year Total	\$25,780

Third Year (one 13-week Summer term plus Fall and Winter semesters)

Books, Equipment and Supplies	\$2,835
Educational Fees (Resident)	24,090
Third-Year Total	\$26,925

Fourth Year (one 13-week Summer term plus Fall and Winter semesters)

Books, Equipment and Supplies Educational Fees (Resident)	\$ 211 24,090
Fourth-Year Total	\$25,301
Four-Year Total	\$100,121

Non-resident students (those not from Missouri, Kansas, Arkansas or New Mexico) are assessed an additional \$9,317 each Fall and Winter semester and \$4,288 for each of the two summer terms.

Student Organizations/Activities

Dental students qualify for membership in a variety of student organizations. Most are affiliated with national dental organizations. Students also can participate in other non-dentistry oriented organizations.

Advanced Education Programs

Chair, Advanced Education Committee: Kim Bray, R.D.H., M.S.

The School of Dentistry offers advanced education curricula leading to graduate certificates in each of six clinical dental specialty areas (endodontics, oral and maxillofacial radiology, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, pediatric dentistry, periodontics), certificates in general dentistry, and master of science degrees in either oral biology or dental hygiene education. The School participates in the Interdisciplinary Ph.D. program through the Department of Oral Biology. Oral Biology's research focus areas are: Biomaterials/Bioengineering of Biological Tissues & Replacements, Mineralized Tissue Biology and Translational and Clinical Research.

Application Information

Applicants to any advanced education program of the School of Dentistry must submit all of the following information:

- Curriculum vitae;
- Original essay of one page describing their professional goals;
- Reference (by a minimum of three individuals capable of evaluating the academic potential of the candidates for advanced education program study);
- Transcripts (from undergraduate, dental, graduate and professional schools attended);
- National board scores;
- Class rank in dental school (if applicable).

Additional information, as identified below, must be supplied by international student applicants:

- TOEFL scores (minimum of 550 on the paper test or 213 on the computer based version) or a demonstrated proficiency in the English language (if English is not the primary language of the applicant);
- Financial statement (guarantee of full financial support or of sufficient financial resources *for the entire cost of the program, including living expenses*).

Advanced education programs (except where indicated) accept the UMKC Application Form. International applicants must use the UMKC International Application for Admission. These forms are available from the Office of Student Programs of the School of Dentistry or at http://www.umkc.edu/dentistry/ assets/forms/advancededucation.htm. The application and required supporting documents should be sent to the chairman of the Advanced Education Committee, c/o Office of Student Programs, at the address at the beginning of this section.

In addition, the programs in advanced education in general dentistry, oral and maxillofacial surgery, and pediatric dentistry also accept the Postdoctoral Application Support Services (PASS) application. Information on the application support service and application form is available from the Office of Student Programs of the School of Dentistry at the address at the beginning of this section, at www.adea.org, and at the admissions phone numbers at the beginning of this section. All required PASS materials should be submitted with the completed PASS application to PASS, 1625 Massachusetts Ave. N.W., Suite 101, Washington, D.C. 20036. The remainder of the information required by the advanced education programs should be sent to the Office of Student Programs. General questions concerning advanced education programs should be directed to the chairman of the Advanced Education Committee at the mailing address at the beginning of this section or at (816) 235-**2056**. However, specific questions regarding any advanced education program should be directed to the pertinent program director. Graduate program directors along with their telephone numbers are identified in a subsequent section.

Financial Assistance

Eligible advanced education students (i.e., those who have earned a D.D.S. or D.M.D. degree from a Commission on Dental Accreditation or Canadian Dental Accrediting Commission accredited program or who hold valid licenses to practice dentistry in one or more states of the United States) in the graduate certificate program of endodontics, general dentistry, oral and maxillofacial radiology, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, pediatric dentistry and periodontics receive an annual financial assistance based on patient treatment fees.

Eligible graduate students in general dentistry, orthodontics and dentofacial orthopedics, periodontics and endodontics, participate in an incentive-based clinical income sharing program; 33 percent of the net fees *collected* for clinical treatment provided by a resident in one of these programs will be paid to the student. Net *collected* clinical fees are defined as gross clinical fees *collected* less scheduled laboratory fees incurred as a part of the treatment procedures and less any waivers granted (except those authorized for payment to the resident by the assistant dean for clinical programs).

Financial aid for advanced education students is also available in the form of a limited number of Chancellor's Non-Resident Awards or graduate research assistantships. The Chancellor's Non-Resident Award provides for the non-resident tuition only (i.e., the difference between Missouri resident and nonresident fees), while the graduate research assistantship includes a stipend plus an award equivalent to the basic education fees (at regular graduate student fee rate and *not* at the graduate dental student fee rate) for 6 hours of graduate credit for both Fall and Winter semesters. Both categories of awards are made on a competitive basis, with quality of academic record as a major criterion. History of research experience or potential for research in the graduate program also serves to identify candidates for the graduate research assistantship.

Other forms of financial aid may be available from federal loan programs (depending on whether or not lending limits have been reached) or from other funding agencies.

Enrollment Fees

Below are outlined the various enrollment fees per term for all advanced education programs at the School of Dentistry except those for the M.S. in oral biology, the Interdisciplinary Ph.D. and the M.S. in dental hygiene education programs (see subsequent part of this catalog section). These fees assume enrollment in 3 or more credit hours for the summer session, and 6 or more credit hours for each of the Fall and Winter semesters. Most programs require fewer credit hours than those per term.

Note: Indicated fees are correct at time of printing. However, fees are subject to change without notice.

Summer Term

Educational Fee (Resident)	\$1,991.70
Educational Fee (Non-resident)	\$3,975.90
Activity/Building/Computing/Health Fees	\$89.85
Activity/Building/Computing/Health Fees	\$09.0J

Fall/Winter Semester (Each)

Educational Fee (Resident)	\$3,983.40
Educational Fee (Non-resident)	\$7,951.80
Activity/Building/Computing/Health Fees	\$164.70

Academic Standards and Procedures: Advanced Education/Graduate Students

The following academic standards and the procedures to be used in dealing with cases of academic difficulty apply to students in all advanced education/graduate programs of the School of Dentistry.

Standards of Scholarship

- Graduate students, regardless of classification, must maintain a 3.0 (B) GPA for all coursework taken for graduate credit at UMKC.
 Graduate students must maintain a 3.0 (B) GPA in their
- 2. Graduate students must maintain a 3.0 (B) GPA in their graduate dental certificate specialty coursework.*
- 3. Grades in graduate dental certificate specialty area coursework must be B or better. Any graduate dental certificate specialty area course that is graded below B must be repeated.*

* Applies only to students enrolled in graduate dental certificate programs.

Probation

- Whenever the overall GPA for UMKC courses taken for graduate credit by a graduate student of any classification falls below 3.0 (B), the student's status for the next term becomes "On probation - See principal graduate adviser." The principal graduate adviser will review the student's progress and provide counsel, and the following conditions apply:
 - (a) A graduate student on probation who is not restored to good academic standing by the end of two successive semesters will be declared ineligible to re-enroll;
 - (b) While on probation, a graduate student must achieve a 3.0 term GPA to enroll for the ensuing term;
 - (c) A graduate student on probation will not be restored to good standing until a cumulative graduate-credit GPA of at least 3.0 is achieved.
- 2. Whenever the overall GPA for courses taken in the student's graduate dental certificate specialty area falls below 3.0, the student will be placed on probation and the following conditions apply:*
 - (a) A graduate student on probation who is not restored to good academic standing by the end of two successive semesters will be declared ineligible to re-enroll;
 - (b) While on probation, a graduate student must achieve a 3.0 graduate dental certificate specialty area GPA to enroll for the ensuing term;
 - (c) A graduate student on probation will not be restored to good standing until a graduate dental certificate specialty area GPA of at least 3.0 is achieved.

* Applies only to students enrolled in graduate dental certificate programs.

Dismissal

- 1. A graduate student who is on probation and fails to attain an overall GPA of at least 3.0 by the end of two successive semesters will be dismissed from the program.
- 2. A graduate student who is on probation and fails to attain a 3.0 term GPA for the succeeding term will be dismissed.

- 3. A graduate student who is on probation and fails to attain a graduate dental certificate specialty area GPA of at least 3.0 by the end of two successive semesters will be dismissed from the program.*
- 4. A graduate student who is on probation and fails to attain a 3.0 graduate dental certificate specialty area GPA for the succeeding term will be dismissed.*
- 5. A graduate student who receives more than four hours of 2.0 (C) grades or below for courses included in the student's graduate program of studies will be dismissed.*

* Applies only to students enrolled in graduate dental certificate programs.

Appeal

Any student who is dismissed from the program has the right to appeal that decision. Appeals shall be made in writing to the associate dean for academic affairs within one week from the time the student receives a notice of dismissal. The associate dean for academic affairs in conjunction with the chair of the Advanced Education Committee shall select a hearing panel of five members of the Advanced Education Committee to hear the student's appeal. At least one member of the hearing panel will be a student. The program director of the program in which the appealing student is enrolled shall be ineligible to sit on the panel. The hearing panel will be chaired by the associate dean for academic affairs. A meeting of the hearing panel will be scheduled within two weeks of the receipt of the student's appeal. During the time the appeal process is being conducted the student shall be allowed to continue in the program.

The hearing panel shall be provided with written statements from the student and the program director as well as all relevant records and documents. The program director or designated substitute and the appealing student must attend the hearing to provide additional information and answer questions from the hearing panel. Other individuals who have information relevant to the situation may be invited to present their information and answer questions for the panel. The student may have an adviser present to advise the student, but this adviser shall be limited to providing advice to the student.

After reviewing the information and conducting the hearing, the hearing panel shall make its recommendation regarding disposition of the case to the dean. All five appointed members of the hearing panel shall have a vote. In case of a tie, the associate dean for academic affairs shall cast the deciding vote. The dean of the School of Dentistry will make the final decision and communicate that decision to the student and the program director.

Students in Cooperative Programs

Students enrolled in programs (e.g., Pediatric Dentistry, Oral and Maxillofacial Surgery) operated jointly by the School of Dentistry and other institutions, such as Children's Mercy Hospital and Truman Medical Center, must remain in good standing with both organizations cooperating in the program. A student who is dismissed by either of the cooperating institutions is ineligible to continue in the program.

Dental Graduate Certificate Programs

A graduate certificate program is offered in each of the following areas:

- Advanced Education in General Dentistry;
- Endodontics;
- Oral and Maxillofacial Radiology;
- Oral and Maxillofacial Surgery;
- Orthodontics and Dentofacial Orthopedics;
- Pediatric Dentistry;
- Periodontics.

General Nature of Programs

Each certificate program curriculum is designed to prepare the student for specialty practice and to help the student meet the educational training requirements for examination by the appropriate American dental specialty board. All programs begin with the summer term (the first week of July) except for graduate dental hygiene education, which begins with the fall semester. Programs vary in length from 12 to 72 months.

Application Deadline

All graduate dental certificate programs *with the exception of* endodontics, oral and maxillofacial surgery, orthodontics, pediatric dentistry and periodontics observe an application deadline date of Oct. 1. This deadline date for receipt of applications at the school is one year before the anticipated enrollment in the program. Deadline dates for endodontics, oral and maxillofacial surgery, orthodontics, periodontics and pediatric dentistry programs are Aug. 15 (endodontics & oral and maxillofacial surgery), Sept. 5, Sept. 1 and Oct. 15, respectively.

Graduate dental certificate programs in endodontics, orthodontics and dentofacial orthopedics, oral and maxillofacial radiology and periodontics, require the UMKC application and the associated supplemental information that was indicated previously. This application material should be sent to the chairman of the Advanced Education Committee, c/o Office of Student Programs, UMKC School of Dentistry, 650 E. 25th St., Kansas City, MO 64108-2795.

The remaining graduate dental certificate programs (i.e., advanced education in general dentistry, oral and maxillofacial surgery, and pediatric dentistry) require either a UMKC application (and associated supplemental information) or application through the Postdoctoral Application Support Services (PASS). A completed PASS application and other materials required by the service should be sent to the address given on the application or as provided earlier. The PASS application should *not* be sent to UMKC. Be aware that about three weeks is required by the service to process PASS applications and deliver them to the designated programs. The length of this processing period should be considered by the candidate so as to meet relevant application deadlines.

The graduate certificate programs in oral and maxillofacial surgery, orthodontics and dentofacial orthopedics and pediatric dentistry participate in the National Matching Services (MATCH) process. Candidates to these programs also must submit to MATCH completed Applicant Agreement and Rank Order List forms by the deadline dates established by MATCH. There are two phases of the MATCH process, each with its deadline date for receipt of Rank Order List forms from applicants. The Phase I deadline (typically toward the end of November each year) is for applicants to the orthodontics and dentofacial orthopedics program. The Phase II deadline (typically in the middle of January annually) is for those applying for admission to the oral and maxillofacial surgery and pediatric dentistry programs.

Necessary forms to participate in the MATCH process may be obtained from National Matching Services, 595 Bay Street, Suite 300, Toronto, Ontario M5G 2C2.

Requirements and Procedure for Admission

Admission to a graduate dental certificate program is competitive. Primary focus is on the applicant's academic record while in dental school, including national board scores. Emphasis also is placed on information gathered from letters of evaluation and curriculum vitae (such as quality of professional practice experience, continuing education experience, research activities, leadership and involvement and participation in professional societies and community service). Another fundamental source of information is supplied from a personal on-site interview that is required of most programs and is by invitation.

Applicants to a graduate dental certificate program must hold a D.D.S. degree or equivalent from a program accredited either by the Commission on Dental Accreditation (CDA) or the Canadian Dental Accrediting Commission (CDAC). Graduates of foreign dental schools, however, are eligible to apply for admission only to the certificate programs in oral and maxillofacial radiology.

Admission

The Advanced Education Committee (AEC) serves as the admission review board for each of the graduate dental certificate programs. Each program has its own admission review board. At a minimum, the admission review board consists of the respective program director and at least two other full-time faculty members.

Each program's admission review board submits its recommendations for acceptance to the AEC for consideration. Recommendations for acceptance include those identified as prime candidates (equal in number to the number of available residencies in the program) and those who serve as "alternates." Acceptance or denial of each recommended candidate is made by the AEC.

Program Descriptions Advanced Education in General Dentistry

Director:

John W. Thurmond, D.D.S., M.S.

Faculty:

Dean A. Elledge, D.D.S., M.S.

Stipend

33 percent of clinic fee collections (as defined in the Financial Assistance section)

The advanced education in general dentistry program is a 12-month program beginning in July for six residents and is designed to refine and advance knowledge and clinical skills in the practice of dentistry. The program bridges the gap between dental school and dental practice. Clinical instruction is offered in all of the clinical disciplines. The didactic component provides postgraduate training in the basic and behavioral sciences, as well as the clinical sciences and practice management. On completion of this program a certificate in general dentistry will be awarded.

An optional second year of residency is offered for two students. The emphases during this year of the program are in advanced restorative and implant dentistry.

Application to this program is either through UMKC or through the Postdoctoral Application Support Services (PASS). See the

http://www.umkc.edu/dentistry/assets/forms/advancededucation.htm in this section for greater detail on both. The deadline for receipt of application at the school is Oct. 1 of the year prior to planned enrollment.

Questions about this program may be answered by contacting the program director's office at (816) 235-2164 or thurmondj@umkc.edu.

Endodontics

Director:

James C. Kulild, D.D.S., M.S., Diplomate, American Board of Endodontics

Faculty:

James A. Dryden, D.D.S., M.S., Diplomate, American Board of Endodontics, Charles Lee, D.D.S., Felix G. Quiason, D.D.S., Edward W. Grimes, D.D.S., James C. Tinnin, D.D.S., Robert H. Altomare, D.D.S., Barton W. Putnam, D.D.S., Paul A. Jones, D.D.S., Sonia Q. Scheerer, D.D.S., M.S.

Program Overview

The endodontics postgraduate program is designed to prepare a dentist for a career in clinical endodontics, research and teaching. The overall goal is to educate dentists to become competent clincial endodontists who will serve the public and the profession at a high level of excellence. It stresses the importance of knowledge and skills in the diagnosis, prevention, and treatment of diseases associated with the dental pulp and related periapical tissues. Didactic and clinical training will also be conducted in other related areas within the scope of practice of the field of endodontics as established by the Endodontic Standards of the Commission on Dental Accreditation. The correlation of basic sciences and clinical sciences is an integral part of the program. A research project is required and comprehensive examinations must be successfully completed. The program is also designed to prepare the graduate endodontist to challenge the requirements for certification as a Diplomate by the American Board of Endodontics. Individuals who successfully complete this advanced education program will be awarded a Certificate in Endodontics.

Accrediation

The Program has earned Initial Accrediation status by the Commission on Dental Accrediation of the American Dental Association.

Eligibility

An applicant for this program must be a citizen of the United States or a foreign national having a visa permitting permanent residence in the United States. Applicants must also submit evidence of graduation from a school of dentistry accredited by the American Dental Association or the Canadian Dental Association.

Program Duration

The 24-month program covers six continuous semesters and begins on July 1.

Number of Residents

There will be two first-year and two second-year residents.

General Applicant Information

Applicants must have successfully completed Part I of the National Dental Board at the time of application and Part II by the time of matriculation. Applicants must have demonstrated English reading, writing and speaking proficiency and a minimum score of 550 on the TOFEL examination. Applications must be submitted using applications furnished by the Office of Student Programs, UMKC School of Dentistry. To receive a brochure describing the program and application materials, use this link http://www.umkc.edu/dentistry/ assets/forms/advancededucation.htm.. The program deadline date for receipt of all completed application materials is August 15.

Extramural Employment

Residents may possibly moonlight outside of the endodontic program subject to the continuing approval of the Program Director. The maximum number of hours per week is limited to 12. More details are available upon matriculation.

Income from Endodontics Program Practice

Residents will be paid approximately 33 percent of the net fees collected for clinical treatment they provide in the program. Net collected clinical fees are defined as gross clinic fees collected, less scheduled laboratory fees incurred as a part of the treatment procedures, and/or less any fee waivers granted.

Tuition and Fees

Estimated school tuition costs can be found in the Fees section of this catalog. If selected for the program, there is a \$1,000 nonrefundable acceptance fee which must be paid within two days of the time of acceptance of the position. More information will be provided to the applicant once he/she is accepted into the program.

Instruments and Equipment

Residents will be required to lease their dental instruments through the school and purchase some other instruments and equipment. The school employs a centralized sterilization program for the lease instruments. Additionally, each resident is required to purchase an endodontic operating microscope head with beam splitter and attachment to accommodate a minimum 4 mega pixel digital camera which also must be purchased. A list of other required instruments and textbooks will be provided when an applicant is selected to attend the program.

Postgraduate Endodontic Clinic

The postgraduate endodontic clinic is a true state-of-the-art facility made possible by the generous donations of Mrs. Virginia Stowers, Dr. Ben Johnson, and other benefactors. All rooms are equipped with dental operating microscopes to include the Zeiss ProErgo which allows power adjustments for focus, zoom, focal length, and intensity of the Zenon light source. It also has a 3-chip video camera and attachment for a Nikon Coolpix digital camera. Each room has its own x-ray head, dual Adec track light system, and ASI dental unit carts complete with air-driven high and low speed fiber optic handpieces, 2 electric handpieces, ultrasonics, dual micro irrigators, micro air syringes, and curing light. The program is linked into the all-electronic paperless patient record management system which also integrates the digital x-ray sensors available in each operatory. Click on PEC for a photo tour of this outstanding clinic.

Financial Assistance

Up-to-date additional information on financial assistance can be found in the School of Dentistry portion of the Financial Aid Charts at http://www.sfa.umkc.edu.

Interview

Competitive applicants will be invited to Kansas City for an interview with the program director and other selected faculty and staff. If invited, the interview is a required part of the application process, and funding is the responsibility of the applicant.

Point of Contact

To request further information, please contact either the Office of Student Programs at (816) 235-2080 or dds@umkc.edu; or the program director, Dr. James C. Kulild, at (816) 235-2749 or kulildj@umkc.edu.

Oral and Maxillofacial Radiology

Director:

Jerald O. Katz, D.M.D., M.S., Diplomate, American Board of Oral and Maxillofacial Radiology

Faculty:

Christos Angelopoulos, D.D.S., M.S., Diplomate, American Board of Oral and Maxillofacial Radiology; John Dane, D.D.S; William J. Fields, B.S, M.S.; Patrick K. Hardman, D.D.S., M.S

Stipend

First year: \$33,000*

*Available to eligible residents (i.e. those who have earned a D.D.S./D.M.D. degree from an American Dental Associationor a Canadian Dental Association-accredited program) contingent on Graduate Medical Education funding. In the second and third year, students may be eligible for additional financial support (up to \$12,000 per year) based on the practice of general dentistry through the program at Truman Medical Center-Lakewood.

This 36-month program begins July 1 and leads to certification in oral and maxillofacial radiology. Students may apply for a master of science degree in oral biology. A separate application process is required for admission into the master's program.

The first year of the program is a hospital-based, ADA-accredited general practice residency program conducted at Truman Medical Center-Lakewood. The second and third years of the program are in oral and maxillofacial radiology. The curriculum is designed so that at the completion of the program, the graduate will be eligible to take the American Board of Oral and Maxillofacial Radiology exam. If accepted into the master of science in oral biology program, additional courses and original research are required. On satisfactory completion of a thesis and the required courses, the master of science degree will be awarded.

An optional 24-month or 30-month program, which does not include the general practice residency, is offered on a space-available basis. The 24-month program leads to certification in oral and maxillofacial radiology. The 30-month program leads to certification in oral and maxillofacial radiology and a master of science degree in oral biology.

One student is accepted into the program per year. Applicants with a D.D.S./D.M.D. degree from a school accredited by the American Dental Association or Canadian Dental Association are preferred. Graduates of dental programs not so accredited will be considered on a case-by-case basis.

Point of Contact

To request further information, please contact the Office of Student Programs at (816) 235-2080 or the program director, Dr. Jerald Katz, at (816) 235-**2138** or katzj@umkc.edu.

Oral and Maxillofacial Surgery

Director:

Brett L. Ferguson, D.D.S., Diplomate, American Board of Oral and Maxillofacial Surgery (ABOMS)

Faculty:

Remy H. Blanchaert, Jr., D.D.S., M.D., Diplomate, American Board of Oral and Maxillofacial Surgery (ABOMS); Alan R. Brown, D.D.S., Diplomate, ABOMS; Edward L. Mosby, D.D.S., Diplomate, ABOMS; Keith Schmitt, D.D.S., Diplomate, ABOMS; Rudane E. Shultz, D.D.S., Diplomate, ABOMS

Stipend

First year: \$37,121	Fourth year: \$41,357
Second year: \$38,502	
Third year: \$39,998	Sixth year: \$44,094

This six-year program, which begins in July, is open to applicants who have a doctoral degree in dentistry from an ADA-accredited dental school, and who are interested in completing both a medical degree and certificate of residency training in oral and maxillofacial surgery.

The program divides the training between the oral and maxillofacial surgery residency program and the curriculum of the School of Medicine. This program provides in-depth coverage of orthognathic surgery, reconstructive surgery, implant surgery, temporomandibular joint surgery, trauma, dento-alveolar surgery and anesthesia, as well as all required basic science and clinical medicine courses for the doctor of medicine degree. A thesis is not required; however, publication in peer-reviewed journals is a requirement of the training program.

An interdisciplinary Ph.D. program is offered through the School of Graduate Studies as an elective for qualified and interested program residents. This will require additional years of study and clinical experience, and will also require a thesis. Separate application to this program will be made after beginning the residency.

Openings are limited to two individuals each year, and new residents must be prepared to begin their training on July 1. Applicants accepted into this program must have the necessary training to obtain a permanent dental license in the state of Missouri prior to the start of their training. Residents are required to enroll in both the UMKC School of Dentistry and UMKC School of Medicine, depending on course and residency requirements being fulfilled in a given term. Appropriate fees from both schools are applicable.

To be considered for admission to the UMKC School of Medicine, one must be a United States citizen or be a permanent resident of the United States; if you hold a permanent resident visa, a copy should be included in your application materials.

Interested applicants must apply through the Postdoctoral Application Support Services (PASS); this program also participates in the National Matching Services (MATCH). See the

http://www.umkc.edu/dentistry/assets/forms/advancededucation.htm in this section for more details regarding additional information to be supplied by the applicant.

Deadline for receipt of application at the school is Sept. 15 of the year prior to anticipated enrollment. A by-invitation interview is a required part of the application process.

Please note that score results of the MCAT examination *are not* a requirement of this program.

Questions about this program may be answered by contacting the program director's office at (816) 404-4356.

Orthodontics and Dentofacial Orthopedics

Director:

Don Thompson, D.D.S., M.S.D. Faculty:

Katherine Kula,D.D.S.; Ram K. Grandhi, B.D.S., M.S.; Dan Blackwell, D.D.S., M.S.; Scott Hamilton, D.D.S., M.S.D.; William Hoffman, D.D.S.; George Muehlebach, D.D.S., M.S.D.; Kurt Muehlebach, D.D.S.; Don Wilson, D.D.S.; Doug Thompson, D.D.S., M.D.; Jeff Thompson, D.D.S., M.S.; Frank Crist, D.D.S., M.S.; Dennis Harper, D.D.S., M.S.

Stipend

33 percent of clinical fee collections (as defined in the Financial Assistance section).*

*Available to eligible program residents (i.e., those who have earned a D.D.S./D.M.D. degree from an American Dental Association- or a Canadian Dental Association-accredited program).

The advanced education program in orthodontics and dentofacial orthopedics has existed since 1946. Nearly 300 UMKC graduates are currently in full-time orthodontic practice. They reside in 36 different states and four foreign countries.

This is a full-time, 26-month program that begins in July. It is designed to prepare the student for community practice of orthodontics and dentofacial orthopedics. Curriculum emphasis is placed on the edgewise technique and on interceptive and functional treatment. Management of craniofacial anomalies is taught didactically and clinically in association with the craniofacial team at Saint Luke's Hospital. Objective inquiry and statistical validation are emphasized in all aspects of this program. Completion of an original research project and paper is required. The computerized clinic facility is a working-research model that simulates the private practice environment. Students can also complete an M.S. degree in oral biology. A separate application is required for the master's program.

Applications are considered from the following groups:

- Fourth-year dental students from ADA- or CDA-accredited schools who are in the top 50 percent of their graduating class;
- Graduates of schools who ranked in the top 50 percent of their graduating classes and have satisfactorily completed a general practice residency or other dental specialty program prior to application;
- Graduates of a School of Dentistry who ranked in the top 50 percent of their class and have been in general practices.

Selection of candidates is a twofold process. First, candidates are stratified on the basis of academic and professional performance. Class standing, national board performance, specialty program, practice experience, leadership roles in organized dental groups, dental school teaching, research experience and recommendations are all considered.

Secondly, applicants meeting screening criteria are invited for interviews. All interviews are conducted at the School of Dentistry on the same day and all invited candidates must attend this session to be eligible for final selection into the class. Four residents are accepted into this program annually. Application for admission must be received at the school on or before September 5 of the year prior to planned enrollment.

Applications may be requested from the Office of Student Programs. Our Web site at http://www.umkc.edu/orthodontics contains a link to Student Programs.

Pediatric Dentistry

Director:

James W. Lowe, D.D.S., M.S., Diplomate, American Board of Pediatric Dentistry

Faculty:

John I. Haynes, D.D.S., M.A.; Brenda S. Bohaty, D.D.S., M.S., Diplomate, American Board of Pediatric Dentistry; Paulette Spencer, D.D.S., M.S., Ph.D.; Robin L. Onikul, D.D.S. Diplomate, American Board of Pediatric Dentistry; Claudia Lopez, D.D.S., Diplomate, American Board of Pediatric Dentistry; Eileen Cocjin, D.D.S.; Amy E. Gartenberg, D.D.S.; Sara A. Oliver, D.D.S.

Stipend

First year \$39,600* Second year \$41,500*

* Plus fringe benefits.

The program in pediatric dentistry is a 24-month program beginning in July. It is designed to prepare the student for a dental practice limited to children. Academic training includes interdisciplinary seminars and coursework in the basic sciences. Clinical training in pediatric dentistry is primarily conducted at Children's Mercy Hospital in Kansas City. The requirements for admission:

- 1. A D.D.S. or D.M.D. from an CDA- or CDAC-accredited dental program;
- 2. Three letters of recommendation from people able to judge the applicant's professional competence and potential for advanced education in pediatric dentistry;
- 3. A record of academic success that would indicate the ability and motivation for graduate-level studies. Previous experience and an orientation to working with children is considered desirable.

Those qualified for admission will be invited to come for a personal interview with the program director and faculty. Two students are accepted each year into this program.

The deadline for receipt of application at the school is Oct. 15 of the year prior to planned enrollment. Application is made either through UMKC or through the Postgraduate Application Support Service (PASS). See the application information in this section for greater detail on both. Applicants must also participate in the National Matching Services (MATCH).

Questions about this program may be answered by contacting the program director's office at (816) 234-3162 or jlowe@cmh.edu.

Periodontics

Director:

Simon R. MacNeill, B.D.S., D.D.S., Diplomate, American Board of Periodontology

Faculty:

John W. Rapley, D.D.S., M.S., Diplomate, American Board of Periodontology; David Pippin, D.D.S., M.S., Nancy Newhouse, D.D.S., M.S., Diplomate, American Board of Periodontology; Lynn Friesen, D.D.S., M.S., Diplomate, American Board of Periodontology; Mark Edwards, D.D.S.; David Thein, D.D.S., M.S.D.; Kelley Thompson, D.D.S.; Daniel J. Thomas, D.D.S., M.S., Diplomate, American Board of Periodontology; Ricardo Gapski, D.D.S., M.S., Diplomate American Board of Periodontology; Keeothana Satheesh, B.D.S.

Program Overview

The periodontic postgraduate program is designed to prepare a dentist for a career in clinical periodontics, research and teaching. It enables the resident to acquire a depth of understanding in oral biology; to become acquainted with the problems in the biology and pathology of oral tissues, and to adequately treat these problems with the most current knowledge and techniques. Program students will be encouraged to use interdisciplinary approaches in the solution of research and clinical problems. The program is designed to provide for the profession and the community, competent bio-clinicians who will become key professionals in clinical practice, research, and teaching. Didactic and clinical training will also be conducted in other related areas within the scope of practice of the field of periodontics as established by the Periodontic Standards of the Council on Dental Accrediation. The correlation of basic sciences and clinical sciences is an integral part of the program. A research project is required and comprehensive examinations must be successfully completed. Original research leading to the master of science in oral biology is possible. Admission into the M.S. program requires a separate application, and the student will apply for admission following successful enrollment into the periodontic program. Meeting all eligibility criteria of the M.S. program is necessary for acceptance into the periodontics program. The program is also designed to prepare the graduate periodontist to challenge the requirements for certification as a diplomate by the American Board of Periodontology. Individuals who successfully complete this advanced education program will be awarded a certificate in periodontics.

Eligibility

An applicant for this program must be a citizen of the United States or a foreign national having a visa permitting permanent residence in the United States. Applicants must also submit evidence of graduation from a school of dentistry accredited by the Commission on Dental Accreditation or the Canadian Dental Accrediting Commission, or verification from the dean of an accredited dental school that the applicant will graduate during the current academic year.

Program Duration

The 36-month program covers nine continuous semesters and begins on July 1.

Number of Residents

Two students are accepted into the program each year.

General Applicant Information

The program deadline date for receipt of all required completed application materials is Sept. 1 of the year preceding planned enrollment. Applicants must have successfully completed Part I of the National Dental Board at the time of application and Part II by the time of matriculation. Applicants must have demonstrated English reading, writing and speaking proficiency and a minimum score of 550 on the TOFEL examination.

Selection is based on academic standing in dental school (grade-point average, class standing and National Board scores) and experience (years in practice, teaching or research, advanced training or degrees, publications, activity in organized dentistry and participation in continuing education). Three letters of recommendation are required.

Applications

Applications must be submitted using applications furnished by the Office of Student Programs, UMKC School of Dentistry. To receive a brochure describing the program and application materials, use this link http://www.umkc.edu/dentistry/assets/forms/advancededucation.htm.

Stipend

No stipend is available.

Income from Periodontic Program Practice

Residents will be paid approximately 33 percent of the net fees collected for clinical treatment they provide in the program. Net collected clinical fees are defined as gross clinic fees collected, less scheduled laboratory fees incurred as a part of the treatment procedures, and/or less any fee waivers granted (see also Financial Assistance section).

Tuition and Fees

Estimated school tuition can be obtained at the Advanced Education Enrollment Fees section of this catalog. If selected for the program there is a \$500 nonrefundable acceptance fee which must be paid within two days of the time of acceptance of the position. More information will be provided to the applicant once he/she is accepted into the program.

Instruments and Equipment

Residents will be required to lease some dental equipment through the school as well as purchase other instruments and equipment. The school employs a new centralized sterilization program for the lease equipment. A list of other required instruments and textbooks will be provided when an applicant is selected to attend the program.

Financial Assistance

Up-to-date additional information on financial assistance can be obtained at http://www.sfa.umkc.edu.

Interview

Competitive applicants will be invited to Kansas City for an interview with the program director and other selected faculty and staff. If invited, the interview is a required part of the application process and funding is the responsibility of the applicant.

Point of Contact

To request further information, please contact the Office of Student Programs at (816) 235-2080 or the program director, Dr. Simon R. MacNeill, at (816) 235-**2119** or macneills@umkc.edu.

Master of Science in Oral Biology

Chairman, Department of Oral Biology: J. David Eick, Ph.D.

Director of Graduate Studies and Research J. David Eick, Ph.D.

Doctoral Faculty Participation:

Cecil Chappelow, Lynda Bonewald, Sarah Dallas, J. David Eick, Philip Feil, Jian Q. Feng, Alan Glaros, Steve Harris, Shiva Kotha, Carole McArthur, John Purk, Michael Reed, Paulette Spencer, Mary Walker, John L. Williams

General Nature of the Program

The School of Dentistry offers a program leading to an M.S. in oral biology. Separate applications are required for the master of science program in oral biology. The goal of the program is to introduce students to the scientific method and to assist them in developing academic careers. The program includes advanced work in basic, behavioral and clinical sciences relating to dentistry. The coursework and thesis present an opportunity for the student to cross traditional departmental lines and undertake an interdisciplinary approach to the study of problems related to oral biology. On successful completion of all necessary coursework and thesis requirements, the student is awarded a master of science degree in oral biology.

Admission Information

Eligibility

All applicants for the master of science in oral biology program must first meet UMKC requirements for admission as a graduate student (see General Graduate Academic Regulations and Information earlier in this catalog).

To be eligible for admission to the master of science in oral biology program, an applicant either must hold a baccalaureate degree or a D.D.S. or equivalent degree. In general, he or she should have a minimum cumulative GPA of 3.0 (based on a 4.0 scale) for all undergraduate work, including dental school (if applicable).

Admission Procedure

Requests for information, including application materials, should be directed to: Chairman, Advanced Education Committee, c/o Office of Student Programs, UMKC School of Dentistry, 650 East 25th Street, Kansas City, MO 64108-2795.

All application materials should be submitted prior to Feb. 1 for students wishing to begin their study in the Fall semester; however, applications will be considered throughout the year.

Completed applications should be sent to: Chairman, Advanced Education Committee, c/o Office of Student Programs, UMKC School of Dentistry, 650 E. 25th St., Kansas City, MO 64108-2795. The completed application packet is forwarded to the Department of Oral Biology for evaluation.

Evaluation Criteria for Admission:

Transcripts

Analysis of transcripts from all prior institutions is required. Under special circumstances (e.g., class standing), consideration may be given to applicants whose GPA is 2.5 - 3.0.

Letters of Recommendation

Three letters of recommendation are required from current or former teachers who are familiar with the applicant's past achievements and research ability/potential.

Letter From Applicant

A letter describing why the candidate is interested in pursuing a master of science in oral biology, how the experience of the

program may be used by the candidate in the future, and a list of potential research interests must be submitted by the applicant.

Interviews

Interviews are not required. However, interviews will be arranged upon the candidate's request at the School of Dentistry. Successful interviews may enhance the candidate's chance of acceptance.

The chairman of the Advanced Education Committee will notify the applicant regarding acceptance status.

Curriculum

The candidate enrolled in this program must complete a minimum of 30 semester hours of coursework. These courses must be listed on the form Master's Degree Program of Study (available from the Department of Oral Biology office) and must be signed by the thesis adviser, members of the thesis committee, and chairman, Department of Oral Biology.

The required core curriculum will consist of the following courses:

- Research Methodology 703 Thesis Writing
- Research Methodology 704 Introduction to Biostatistics Biomedical Science 751 Elements of Scientific Method Biomedical Science 752 Special Topics in Oral Biology
- •
- Biomedical Science 799 Research and Thesis •
- Research Methodology 700 Introduction to Research . Methodology

The thesis committee may require additional courses. This catalog contains listings of appropriate graduate level courses. Some examples of additional courses applicable to the program:

- Basic Medical Science 700 Anatomy of Head and Neck
- Biomedical Science 710 Oral Biochemistry •
- Biomedical Science 760 Physiology of Oral Hard Tissues
- Periodontics 730 Biology of the Periodontium •
- **Biomedical Science 739 Dental Biomaterials** •
- Biomedical Science 740 Oral Pathology I •
- Biomedical Science 743 Advanced Biomaterials •
- **Biomedical Science 747 Research Instrumentation**
- Biomedical Science 759 Special Problems in •
- Pharmacology Biomedical Science 802 Immunopathology
- Biomedical Science 805 Molecular Biology •
- Biomedical Science 806 Oral Microbiology and Infectious Disease

Of the 30 semester hours, no more than 6 semester hours of graduate work taken at institutions other than UMKC may be transferred. The transfer of 6 graduate credit hours includes those courses deemed appropriate to the student's program of study by the thesis committee.

The student must conduct an original investigation in a basic, behavioral or clinical science area and write a thesis describing the research and reporting the results of the study. The student will be required to successfully defend the thesis in a final oral examination at a university-wide seminar. No qualifying examination or language examination is required for the degree.

Enrollment in BIOSC 799 Research and Thesis is required as a part of the student's program of study. To reflect the student's research involvement in activities that will ultimately lead to the completion of the thesis, multiple semesters of enrollment in this course are allowed. Cumulative credit for this course may not exceed 6 hours. Until the thesis is successfully completed and defended, a grade of incomplete (I) is given for each term of enrollment in this course. On successful defense and completion of the thesis, incomplete grades will be changed to an appropriate letter grade.

While the master of science program in oral biology can be pursued simultaneously with dental specialty certificate programs, it is likely that such a student can expect to spend 6 months or longer beyond the period designated for the certificate program to obtain the master of science in oral biology.

Thesis Research

The major criterion of the master of science in oral biology is original research. This original research may be conducted in basic, behavioral or clinical sciences. Adherence to all standards established by the School of Graduate Studies is necessary for final acceptance and approval of the thesis.

Selection of Thesis Chair

Each student is responsible for selecting an adviser. The adviser selected must be a full member of the UMKC graduate faculty associated with the Department of Oral Biology and should be actively engaged in research relevant to the student's primary area of interest. The selection of a thesis adviser must be completed within the student's first year of study and approved by the director of graduate studies, Department of Oral Biology.

Thesis Committee

The student's thesis adviser will be the chair of the thesis committee. Within the student's first year of study, the student and his/her adviser will select two or more additional faculty members to serve on the thesis committee. One member of the thesis committee must be a member of either the Department of Oral Biology or the Department of Behavioral Science. The majority of the faculty selected must be members of the full graduate faculty. Committee members should be selected for their ability to provide additional advice and resources to augment the thesis research of the student. The form, Recommendation for Appointment of Adviser of Supervisory Committee (available from the Department of Oral Biology office) must be signed by the Department of Oral Biology to assure all Department of Oral Biology and School of Graduate Studies committee requirements are observed. The thesis committee will determine what courses are required of the student and all thesis committee members must approve the thesis research proposal before the research project is initiated. The thesis committee also will assist the students to undertake and successfully complete their thesis research and determine when the M.S. thesis is complete.

Thesis

Original research will be used to construct a formal thesis conforming to the standards set by the School of Graduate Studies (see University of Missouri-Kansas City Guide to Formatting Graduate Theses, which can be obtained at the UMKC Dental Library). At least eight weeks prior to graduation, the completed thesis must be submitted to the thesis committee for its preliminary approval.

After all members of the thesis committee have read and given preliminary approval to the content of the thesis, and the instructor(s) of the course Research Methodology 703 Thesis Writing has given preliminary approval to the format of the thesis, and at least six weeks prior to graduation, the original typewritten copy must be submitted to the School of Graduate Studies for certification by the dean of Graduate Faculties and Research. After the thesis has been certified for acceptance by the dean of Graduate Faculties and Research, the thesis committee will require the student to defend the thesis. School of Dentistry regulations require students to defend their theses by presenting university-wide seminars on their research. In addition to the required distribution of copies (see the UMKC Guide to Formatting Graduate Theses and the General Graduate Academic Regulations and Information section of this catalog), a copy of the thesis also must be received for retention by the Dental Library of the School of Dentistry.

Academic Requirements

A 3.0 or better GPA is required of all work applicable to the master's degree. A student is subject to termination from the master's program if: (1) their GPA falls below 3.0; (2) more than four hours of C (2.0) grades are received; or (3) any grade of D or F is received.

A recommendation for dismissal from the program will be made by the student's adviser(s) to the Department of Oral Biology and forwarded to the School of Dentistry Advanced Education Committee.

Other Requirements

Students will be expected to comply with all rules, regulations and requirements specified in the General Graduate Academic Regulations and Information section of this catalog.

Master of Science in Dental Hygiene Education

Director:

Kimberly S. Bray, R.D.H., M.S. Director, Division of Dental Hygiene: Cynthia C. Amyot, R.D.H., M.S., Ed.D.

History

The master of science degree in dental hygiene education program provides the educational and professional environment to enrich dental hygienists through a collaborative experience resulting in competent graduates able to pursue diverse innovative career opportunities. Candidates may pursue graduate studies with a concentration in teacher preparation (clinical and classroom teaching) and research. Additional opportunities are available in areas of gerontology, special patient care and health services administration.

The graduate program has a rich history of preparing dental hygienists for leadership roles in academia and industry. The program is housed in the School of Dentistry and is one of the few such graduate programs in dental hygiene in the country.

The graduate program is specifically designed to be flexible and innovative to meet the candidates' educational goals and objectives for careers in the dental hygiene profession, as well as to help meet the dental hygiene faculty and administrative needs of accredited dental hygiene and dental assisting programs. A distance education option is also available. Degree requirements may vary; check with the program director.

Requirements for Admission

Graduation from an accredited school or program of dental hygiene, a baccalaureate degree from an accredited college or university, and a satisfactory academic undergraduate record are required. The deadline for application is Nov. 1 (early admissions), or Feb. 1 for the class beginning the following Fall semester. An interview is a required component of the admissions process. Interviews are granted to candidates for this program by invitation only. Application forms and information may be obtained from the Director, Graduate Dental Hygiene Education, Division of Dental Hygiene, at the address at the beginning of this section. Enrollment is limited.

Questions about this program may be answered by contacting the program director's office at (816) 235-2056 or brayk@umkc.edu.

Completed applications *must be submitted to the Director* of Graduate Dental Hygiene Education at the above address by Nov. 1 (early admissions) or Feb. 1 for the class beginning the following Fall semester. The required application materials must include:

- 1. UMKC application for admission;
- 2. Supplemental application for admission;
- 3. Official transcripts of all previous academic work;
- 4. Three completed recommendation forms (including one from the director of the dental hygiene program attended);
- 5. A letter of intent sent to the director of graduate dental hygiene education explaining the applicant's main area of graduate dental hygiene interest (clinical and classroom teaching, special patient care, health services administration, gerontology or advanced clinician).

Job Opportunities

Graduate students in dental hygiene may prepare for careers in clinical and classroom education, research, administration, gerontology or special patient care in hospital or community-based settings. Availability of positions for graduates of the master of science degree program has been excellent in these career areas. Assuming the number of dental hygiene programs in the country remains at about 260, the need for highly qualified educators, researchers and administrators with master's degrees in dental hygiene education will remain strong. Students who plan a career in teaching, research or administration may consider graduate work leading to a Ph.D. degree.

School Activities

The philosophy of the graduate program advocates individualized career planning and advising students to help meet their specific needs and interests in an atmosphere conducive to enhancing the students' critical thinking, decision making and self-evaluative skills as health care professionals.

Graduate students have the opportunity to spend one semester as an extern at another dental hygiene institution or health care facility. This usually is determined by the graduate student's specialization and preference for the extern site, as well as established criteria for the externship. This experience has proved invaluable for most graduate students selecting this option.

Educational Fees

Students in this program are assessed educational fees (as of the 2002-03 academic year) as follows.

Summer Term

Educational Fee (Resident)	\$209.60/cr. hour
Educational Fee (Non-Resident)	\$402.40/cr. hour
Activity Fee	\$12.72/cr. hour
Computing Fee	\$9.90/cr. hour
Student Health Service Fee	\$2.18/cr. hour
Multipurpose Building Fee	\$15
Fall/Winter Semesters	
Educational Fee (Resident)	\$236.60/cr. hour
Educational Fee (Non-Resident)	\$402.40/cr. hour
Activity Fee	\$12.72/cr. hour
Computing Fee	\$9.90/cr. hour
Student Health Services Fee	\$2.18/cr. hour
Multipurpose Building Fee	\$30

Note: Fees are subject to change without notice.

Scholarships

Graduate research assistantships and nonresident tuition-waiver awards are available to students on a competitive basis. The American Dental Hygienist's Association awards scholarships to dental hygienists at the master's degree level on a competitive basis. Please contact the director of graduate dental hygiene education for more details of possible funding for graduate studies through the Division of Dental Hygiene.

Requirements for Graduation

Requirements include:

- 1. A 3.0 GPA;
- 2. Successful completion of 36 credit hours with a thesis or non-thesis option;
- 3. All other requirements for graduation as stated in the General Graduate Academic Regulations and Information section of this catalog.

Customized Plan of Study

The graduate program is flexible and innovative in its tailoring to the interests and needs of the graduate student. Both a thesis and non-thesis option are available for the master's degree program. In addition, the program allows students to enroll on either a part-time or full-time basis. The typical length of study for the thesis track is two years. Entering students will begin coursework in the Fall semester. An innovative distance education option allows the candidate the prestige of a graduate education with the convenience of online technology. Interested candidates are advised to consult with the program director.

The curriculum is designed to provide meaningful academic experiences and activities for each graduate student as matched with program coursework offerings, facilities and resources. Typical courses for the graduate program depend on the graduate student's area of concentration. A classroom and clinical teaching area of concentration includes classroom and clinical student teaching with dental hygiene and dental students, curriculum concepts and practicum, special problems in dental hygiene, principles of testing, introduction to research methodology, biostatistics, periodontics and local anesthesia. A wide variety of electives may be chosen from those offered in the School of Dentistry, the Henry W. Bloch School of Business and Public Administration, the School of Education, the College of Arts and Sciences, the School of Nursing or any other academic unit at UMKC.

The School of Dentistry provides an ideal environment for graduate students to interact with clinical and basic science dental faculty and other advanced-education specialty students for an exchange of ideas, knowledge and resources. In addition, graduate dental hygiene students actively participate in lectures, seminars, and practical and independent study that address their needs and interests for their future careers.

Graduate students are required to design and conduct a research project in fulfillment of their research requirement for both the thesis and non-thesis options of the program. This is accomplished under the supervision of a research advisory committee. Basic knowledge and skills in conducting research are gained through research coursework offered both in the School of Dentistry and on the UMKC campus. Funding for graduate student research is often available from the Dental School Rinehart Foundation, as well as other external funding sources.

Required Courses for the Master of Science Degree

Program in Dental Hygiene Education

Required Course	es	Hours
DENHY 4020	Local Anesthesia and Pain Control	2
DENHY 4040	Introduction to Research	
	and Instruction	1-2
DHYG 500	Educational Methologies	2-4
DHYG 510	Student Teaching and Conference I	2-4
DHYG 516	Special Issues in Higher Education	2-4
DHYG 530	Clinical Instruction and Conference	2-4
DHYG 553	Seminar in Advanced Concepts	
	and Methodologies	2-4
DHYG 595	Scientific Writing	1-2
DHYG 599	Research and Thesis	
	(thesis option only)	1-6
RESME 700	Intro. to Research Methodology	
	(or its equivalent)	2-3
RESME 703	Thesis Writing	1
RESME 704	Introduction to Biostatics	
	(or its equivalent)	2-3
Total	· • •	20-39

Total number of credit hours required for completion of the graduate program is 36 credit hours for either the thesis or non-thesis option.

Other Requirements

Students will be expected to comply with all rules, regulations and requirements in the General Graduate Academic Regulations and Information section of this catalog.

Oral Biology Interdisciplinary Ph.D. Program

Discipline Coordinator J. David Eick

Doctoral Faculty Participation

Lynda Bonewald Cecil Chappelow Sarah Dallas J. David Eick Philip Feil Jian Q. Feng Alan Glaros

Steve Harris Shiva Kotha Carole McArthur Michael Reed Paulette Spencer John L. Williams

The program consists of three areas:

- Biomaterials/Bioengineering of Biological Tissues and Replacements,
- Mineralized Tissue Biology and
- Translational and Clinical Research.

For discipline specific requirements, see the School of Graduate Studies catalog or visit their Web site at http://www.umkc.edu/sgs. For more information on the Oral Biology Interdisciplinary Ph.D. Program, visit our Web site at http://www.umkc.edu/dentistry/oralbiology.

Biomaterials/Bioengineering

This program has been in place for over a decade and includes collaborations with Midwest Research Institute and major industry such as the 3M-ESPE Company. Research from this program has produced an oxirane/polyol dental composite system that will be available for clinical testing soon. The improvement of advanced dental composites systems is greatly promoted when multi-disciplinary teams of scientists come together with their talent, laboratory resources, and equipment. Indeed, the purpose of this program is to provide the synergistic focus for the team of scientists to improve the low stress/low shrinkage adhesive oxirane/polyol based composite system and to understand more fully the underlining scientific principals governing the behavior of these materials.

A major thrust that has been added to the Biomaterials program is the Bioengineering component. A fundamental focus of the Bioengineering component is the examination for the micro- and nano- properties and structure of natural biomaterials such as bone, dentin and enamel. These studies which are clearly aligned with both the Biomaterials and Bone Biology programs are conducted within the UMKC Center for Research on Interfacial Structure and Properties (UMKC-CRISP). A primary and fundamental goal of UMKC-CRISP is to provide a research environment that serves as a catalyst for collaborative investigations focused on applying the principles of biological systems to the hierarchal design, synthesis and application of biomaterials. In contrast to the usual protocol for development of materials, UMKC-CRISP researchers use the knowledge and understanding derived from biological systems to drive the development of biomaterials that will have the qualities necessary for long-lived functional adaptation and interaction at the cellular, tissue and organ levels. The facilities within UMKC-CRISP provide scientists with state-of-the-art instrumentation for structure/property characterization of synthetic materials, biological tissues and the material/tissue interface. The resources available within UMKC-CRISP provide investigators the opportunity to explore the spectrum of opportunities represented by the integration of biology and engineering.

Mineralized Tissue Biology

This program is composed of bone biologists with specific and unique skills that together compose a comprehensive team for the study of mineralized tissues. The technology available for the study of mineralized tissues include genomics, proteomics, transgenic mice, bone analysis for such properties such as density, hardness, strength, and histomorphometry for analysis of both bone and bone cells. 3D microscopy and applications of mechanical strain, both in vitro and in vivo, are being established among other technologies. The goal of the program is to approach important issues in bone and tooth development, physiology, and disease from basic experiments to clinical research. In vitro approaches are first necessary to properly design transgenic approaches which are essential before clinical trials. All three components, basic, transgenics, clinical research, are essential for translating findings into prevention of disease and treatment in the clinic.

Translational and Clinical Research

Clinical research is a third main research area within the UMKC School of Dentistry. Our definition of clinical research is the same as that used by the National Institutes of Health: Patient-oriented research, epidemiologic and behavioral studies, and outcomes research and health services research. As suggested by these definitions, clinical research is a broad concept that incorporates a wide range of activities involving human participants directly and indirectly.

At the present time, on-going clinical research efforts include those involved with temporomandibular disorders, salivary disorders, and restorative materials. A Clinical Research Center at the School of Dentistry provides facilities to carry out contracted research supported by commercial firms as well as clinical research directed by individual faculty.

Dental Hygiene-Graduate Courses

500 Introduction to Educational Methodology (2-4). This course is designed to introduce the student to educational methodologies in higher education.

Topics include are: preparation of course syllabi, the use of instructional objectives in course development, development of presentation objectives, teaching/learning strategies, instructional presentation, basic principles of testing, student and self evaluation. Offered: Fall Summer Semester on-line only.

510 Student Teaching and Conference I (2-4). Student teaching experience in classroom areas as selected by the student under the direction of a supervising professor. The student develops behavioral course objectives, test and examination items, classroom presentations, and prepares student evaluations in the selected classroom teaching areas. The student may select teaching assignments in one of the developed externship student teaching programs. Conferences will be held in conjunction with the course. Offered: TBA

512 Student Teaching and Conference II (2-4). This course is designed to provide the graduate dental hygiene student with additional experience in classroom teaching. Student teaching experiences will be selected by the student under the direction of and in conference with a supervising professor. Offered: TBA

516 Special Issues in Higher Education for Health Professional (2-4). This course is designed to introduce the student to issues encountered in higher education. Weekly classroom sessions will address subjects such as: grantsmanship, accreditation, promotion and tenure, faculty governance, outcomes assess, managed care, use of theory to guide practice, and case-based learning.

520 Independent Study in Hospital Dentistry (2-4). An introduction to the role of the dental hygienist in one or more clinical settings within the hospital environment. The settings may include the operating room, surgical wards, pre- natal clinics, post-partum area, medical docent teams, medical clinics, specialty clinics and other areas of special interest. Specific student experiences are to be arranged in consultation with and under the direction of the hospital dental hygiene faculty member.

530 Clinical Instruction and Conference I (1-4). Actual experiences in clinical instruction under the supervision of a School of Denistry faculty member. Students will be encouraged to apply knowledge gained in the didatic component during actual clinical instructional experiences. Offered: Fall

532 Clinical Instruction and Conference II (1-4). This course is designed to provide the graduate dental hygiene student with additional experience in clinical teaching. Student teaching experiences will be selected by the student under the direction and in conference with the Director and supervising professor. Offered: TBA

553 Seminar in Advanced Clinical Techniques and Methodologies (2-4). This course will expand on the student's basic knowledge of the dental hygiene process of care. Current scientific literature related to topics in dental hygiene and oral health will be examined to enhance background knowledge related to the dental hygiene process of care and foster an attitude of life-long learning. Offered: Winter

560 Practicum in Clinical Supervision and Management (2-4). Practical experience in functioning as a Clinic Supervisor. Clinical managerial projects will be assigned according to students' interests and goals by agreement between student and instructor. Offered: TBA

565 Advanced Special Patient Care Practicum I (1-4). This course will provide the graduate dental hygiene student with the opportunity to participate in patient care and investigate topics related to the interdisciplinary team approach to care of the patient with cancer. Offered:TBA

566 Advanced Special Patient Care Practicum II (1-4). This course will provide the graduate dental hygiene student with the opportunity to explore the relationship of an oncology dental program to medical health care facilities. Offered: TBA

570 Administrative Practicum (1-4). Practical experience in administration. The student selects areas of responsibility based on their goals and interests in administration. Possible areas of involvement are: recruitment, admissions, curriculum and course development, course scheduling, grant and report writing and student advising. Offered: TBA

580 Special Topics in Dental Hygiene-Expanded Duties (3). Theoretical and clinical experience in expanded duties for the dental hygienist in the areas of local anesthesia and restorative dentistry. Offered: TBA

590 Independent Study (1-4). Independent study of a particular topic or area of interest to the student in dental hygiene/dentistry and/or higher education. Offered: TBA

595 Writing in Science (1-2). This seminar course is designed to provide advanced education students in the health professions the skills necessary to write and communicate in science. Course activities and topics include: critical analysis of the literature, annotated bibliographies, structure and organization of documents, style and usuage, drafting, revising and finishing. Participants will practice the craft of scientific writing not only as the writer but also as the reader providing correction and reorganization where

appropriate. While this course examines many writing tasks, exercise culminate with the development of a research protocol or scientific article. Offered: Winter Semester, on-line only

599 Research and Thesis (1-6). Offered: TBA

899 Required Graduate Enrollment (1).

Dentistry Courses

305 Operative Dentistry I Lecture (1). An introduction to the prevention and principles of the restorative treatment of dental caries.

305L Operative Dentistry I Laboratory (2). Restorative procedures discussed in Dent 305 are performed on laboratory manikins.

306 Introduction to Ethics and Professionalism (1). An introduction to basic concepts in the analysis of ethics, morals and values. Systems of ethical analysis are introduced and explored using contemporary issues from medicine and dentistry. Students will explore their own ethical values and apply this knowledge to issues in professional education.

310C Clinical Assisting (2.5). The student will first learn the principles and techniques of chairside dental assisting with the aid of lectures, demonstrations, and visual aids. The student will then assist third and fourth year students in the clinic. Offered: Fall

312 Dental Behavioral Science I (1-2). An introduction to the basic principles of behavioral science as they relate to dentistry. Topics include basic principles of human behavior, compliance and dental self-care behavior, fear and anxiety behavior, pain behavior and stress related to dental practice.

314C Introduction to Oral Diagnosis (3). A combined lecture/clinic course in which the student will be introduced to the techniques of Oral Diagnosis and the studies of patient history taking, patient examination, patient diagnostic techniques, radiographic techniques, and radiation hygiene. Personal oral hygiene and patient education will be stressed.

316 Dental Morphology (3). This lecture/laboratory course introduces the student to dental terminology, then continues with the study of masticatory biomechanics and occlusion. The students' knowledge of dental morphology and occlusion are then reinforced by having them construct wax models of the human succedaneous and permanent dentition.

317 Dental Occlusion (3). This lecture/laboratory series covers the judicious use of gnathologic instruments in dental reconstruction and occlusal therapy. Provides an introduction to temporomandibular disorders with special emphasis upon pathologies caused by the occlusion. The practical application of gnathologic instruments is demonstrated in the laboratory, followed by various occlusal treatments useful in the management of temporomandibular disorders. Offered: Winter Semester.

318 Dental Biomaterials Lecture (1). An introduction to the study of common dental materials and their manipulation as used in modern dentistry.

328 Introduction to Dental Research Literature (1). A study of the scientific literature of dentistry from the viewpoint of the reader. Topics include the identification and evaluation of key components in the reading and understanding of dental research.

335 Applied Neuroscience (2). This course serves as an introduction to nervous system function and its relation to the practice of dentistry. Primary focus is on synapses, with applications to the innervation of the oral cavity and patient management. Appropriate content and principles from the basic sciences and neurology will be integrated into a unit readily applicable to clinical practice.

350 Introduction to the Histopathology of Oral Tissues (2.5). A comparison of the microscopic anatomy of healthy and diseased oral tissues.

390 Dental Research Experience (1). This independent study course focuses upon experience gained in both an area of dental research as well as the process of research in working with an established dental researcher.

410 Operative Dentistry II Lecture (1). A continuation of 305. Principles of cavity preparation, materials and techniques are stressed.

410L Operative Dentistry II Laboratory (2). A continuation of 305L. Restorative procedures are performed on laboratory manikins and extracted teeth.

411 Operative Dentistry III Lecture (1). A continuation of Dent. 410.

412 Anesthesiology I Lecture (1). Infiltration and regional anesthesia; technique of injections; complications of local anesthesia; a brief overview of conscious sedation.

414 Pathology I Lecture (4). The general etiology of disease; circulatory and metabolic disorders; degenerative processes; inflammation; infection and immunity; tumors; and organ system pathology.

415 Pathology II (2). A study of developmental defects, inflammatory diseases, and neoplasia of the oral region.

416 Complete Removable Prosthodontics I Lecture (1). A study of the edentulous patient, pre-extraction records, mouth preparation for dentures, impression making, jaw relations, the arrangement of teeth and processing.

416L Complete Removable Prosthodontics I Laboratory (2). Complete dentures are constructed. Procedures used in the clinic are followed and a manikin serves as the patient.

417 Removable Partial Prosthodontics Lecture (3).

420 Periodontics I/II (2). A study of the biological mechanisms involved in a wide range of diseases of the periodontium. The course of study emphasizes the relationship of the science of periodontology to the clinical practice of periodontics. Offered: Winter

422 Fixed Prosthodontics I Lecture (1). Fundamental considerations of fixed bridge construction; diagnosis and treatment planning; tooth preparation; impression techniques; temporary coverage; construction of many types of crowns, including porcelain-veneered crowns; and associated laboratory techniques.

422L Fixed Prosthodontics I Laboratory (2). The student develops skills (gains experience) in tooth preparation, impression taking, articulation, pontic design, waxing, casting, finishing, and assembling various fixed prosthesis.

423 Fixed Prosthodontics II Lecture (1). A continuation of Dent. 422.

423L Fixed Prosthodontics II Laboratory (2). A continuation of Dent. 422L.

424 Oral Diagnosis and Oral Medicine (1). Includes presentation of the principles of history taking and examination of the patient, the signs and symptoms of diseases and the medical management of patients with illness. The dental management of patients with systemic disease is stressed.

426 Oral Radiology Lecture (2). Radiation physics, radiation biology, quality assurance, imaging principles, radiation hygiene, radiographic interpretation and techniques of intra-oral survey are presented.

429 Dental Behavioral Science II (1). An in depth study of the processes of effective dentist-patient communication.

430C Preventive Periodontics II (3). Laboratory in root planning (root detoxification) and clinical experience in providing direct patient care in recall diagnosis, patient education, prophylaxis, and monitoring recall programs. Offered: Winter.

431 Pediatric Dentistry I Lecture (1). The student is introduced to techniques used in treating the child patient; including examination, diagnosis, interpretation of intra-and extra-oral radiographs, treatment planning and preventive dentistry.

435 Endodontics I Lecture (1). An introductory course in endodontics emphasizing pulpal biology, endodontic diagnosis and treatment planning.

436 Orthodontics: Growth and Development (1). The anatomic, anthropologic, embryologic, genetic and psychologic aspects of growth and development with special emphasis on the normal and abnormal development of craniofacial structures.

439 Medical Emergencies in the Dental Office (1).

440 Oral Surgery I (1). An introduction to the basic principles of oral surgery.

441C Treatment Planning (2). The student is introduced to comprehensive treatment planning in dentistry using lectures, cases, and class discussions. Offered: Winter

442 Endodontics II Lecture (1). A continuation of the study of endodontics emphasizing non-surgical endodontics, surgical endodontics and post-endodontic treatment.

442L Endodontics Laboratory (2). The preparation and filling of root canals of extracted teeth in the laboratory setting.

460C Review of Pre-Clinical Dentistry (2). A combination of lecture, selected readings and independent study designed to reinforce and integrate concepts contained in the pre-clinical dental curriculum. The course will meet for 3 hours each week for the first 7 weeks of the term, with an additional 11 hours of independent computer-aided study required during this period. Offered: Summer Semester.

501C Intro to Comprehensive Patient Care (1-10). The purpose of this course is to introduce the student to the clinical environment and to familiarize him/her with comprehensive patient care. In addition, it allows the student to develop and interpret basic diagnostic aids that enable him/her to arrive at a diagnosis and treatment outline, the beginning steps of comprehensive care. Patient care is provided following the outlined treatment plan. The student will apply the principles/concepts of patient care. Students begin treatment of a "family" of patients under faculty supervision. Prerequisite: first and second year courses.

502 Grand Rounds I (1). Students listen to and critique reports of dental procedures and techniques made by fourth year students. 503R Grand Rounds II (1). Continuation of DENT 502.

507C Pediatric Clinical Dentistry II (1-2). Clinical application of those principles taught in preceding terms.

510C Comprehensive Patient Care II (1-10). The purpose of this course is to reinforce and refine patient management/treatment skills that students have been introduced to in D501C and D509C. Students should be familiar with the critieria outline in the Clinic Orientation Manual and respective departments that will be use to evaluate their patient management/treatment performance.

514 Pathology III Lecture (1). Continued study of pathological conditions of the oral region with emphasis on clinical signs and symptoms.

515 Periodontics III (1). The overall goal of this course is to help the pre-doctoral students to recognize periodontal disease and treatment plan the needed periodontal therapy. Specific goals are to enhance the student's knowledge of the surgical aspects of periodontal therapy, and the relationship of periodontal disease and its treatment to the overall dental treatment plan. Offered: Fall

519 Advanced Dental Materials (0.5). This course is a review of dental materials in general, an introduction of new materials and uses.

521 Oral Surgery II Lecture (1). The diagnosis and treatment planning of fractures, cysts, neoplasms, and other problems in oral pathology of the mandible and maxilla and associated anatomical structures.

522 Oral Surgery Lecture III (1). A continuation of Dent. 521.

522C Periodontics Clinical II (1-2). Clinical application of those principles taught in preceding terms.

524 Principles of Medicine and Physical Diagnosis (2). Includes presentation of the principles of history-taking and examination of the patient, the signs and symptoms of diseases and the medical management of patients with illness. The dental management of patients with systemic disease is stressed.

526 Orthodontics I (1). A lecture course in preparing and analyzing the two basic orthodontic records, study casts, and lateral cephalometric roentgenograms.

526C Preventive Dentistry Clinical (1). Clinical application of those principles taught in preceding terms.

526L Orthodontics I Laboratory (2). A laboratory course in preparing and analyzing the two basic orthodontic records, study casts, and lateral cephalometric roentgenograms.

527 Therapeutics (2). Therapeutic use of drugs in dental practice.

531 Complete Removable Prosthodontics II Lecture (1). Advanced principles of complete denture construction are stressed and emphasis on their clinical application is included. Additional clinical approaches to the partial and completely edentulous patient are explored.

532C Oral Diagnosis Clinical II (1-2). Clinical application of those principles taught in preceding terms.

534 Advanced Predoctoral Prosthodontics (1). Students will learn the coordinated application of advanced techniques and products used for complete, fixed and removable partial prosthodonitics. The course is coordinated amalgamation of principals from these three discipline of restorative dentistry. Offered: Winter

537 Oral Oncology (0.5). A lecture course on oral oncology will deal with the biologic aspects of cancer; the detection of oral cancer and the different modalities of treatment of cancer; the dental aspects both from surgical reconstruction and prosthetic reconstruction following cancer surgery; and management of the patient prior to, during, and following radiation therapy to the head and neck and during chemotherapy for systemic cancer.

538 Orthodontics II (1). The importance of occlusion; etiology and classification of malocclusion; types of appliances with a critical analysis of each and their use in treating different types of malocclusion. Special attention is given to interceptive, preventive, and minor corrective procedures.

542C Operative Dentistry Clinical II (1-2). Clinical application of those principles taught in preceding terms.

551CR Oral Surgery Clinical (2). Clinical application of those principles taught in preceding terms.

556 Radiographic Interpretation (0.5). This is a comprehensive multidisciplinary course in radiologic interpretation of normal anatomy, anomalies, dental caries, periodontal disease, periapical pathology and infections of the maxilla and mandible.

558 Radiographic Interpretation II (0.5). This is a continuation of radiographic interpretation in which the students continue to deepen their knowledge in radiologic interpretation of normal anatomy, anomalies, dental caries, periodontal disease, preciapical pathology and infections of the maxilla and mandible. Offered: Winter

559 Diagnosis and Management of Orofacial Pain (1). Essential conceptual, clinical and technical information and skills necessary in the diagnosis and treatment of Orofacial Pain States. Diagnostic protocols and radiographic procedures and their integration as it relates to painful head and neck conditions are presented in depth. Differential diagnosis and special diagnostic techniques are also addressed. Behavioral factors associated with the development of chronic pain and complicating the management of pain states are identified and discussed.

560C Clinical Management I (1-4).

562C Removable Prosthodontics Clinical II (1-2). Clinical application of those principles taught in preceding terms.

563CR Clinical Management II (1-5).

584 Case Presentation (0.5). an applied course directed at improving communication skills with patients in order to maximize case acceptance and patient satisfaction. Offered: Fall

591C Professional Development I (1-2). Clinical application of those principles taught in preceding terms.

592C Professional Development II (1-2). Clinical application of those principles taught in preceding terms.

593C Professional Development III (1-2). Clinical application of those principles taught in preceding terms.

595 Introduction to Implant Dentistry (1). To provide the undergraduate student with a solid background into the role of implant dentistry in their profession. Advances in technique and materials which are responsible for improved predictability will be presented. Emphasis will be on patient selection, treatment planning and basic restorative techniques. The student will be able to initiate uncomplicated dental implant procedures with this information and will be prepared to enter into more advanced continuing education and graduate programs in this subject.

600 Review of Clinical Dentistry (1-2). A summative review of the basic areas of clinical dentistry.

601C Endodontics Clinical (1-2). Clinical application of principles taught in preceding terms.

602 Grand Rounds II (1). Students develop and present oral reports typically given at professional meetings such as case presentations, research reports or presentations of new techniques. These reports are then critiqued by faculty and students attending the presentation.

603 Grand Rounds III (1). A continuation of DENT 602.

604 Grand Rounds IV (1). A continuation of DENT 603.

605 Review of Clinical Dentistry II (1-2). A review of foundation knowledge for clinical dentistry.

606C Pediatric Dentistry Clinical I (1-2). Clinical application of those principles taught in preceding terms.

607C Pediatric Dentistry Clinical IV (1-2). Clinical application of those principles taught in preceding terms.

609C Comprehensive Patient Care III (1-10). The purpose of this course is to reinforce and refine patient management/treatment skills that students have been introduced to in D501C, D509C, D510C. Students should be familiar with the criteria outlined in the Clinic Orientation and respective departments that will be used to evaluate their patient management/treatment performance.

610 Anxiety and Pain Control in Dentistry (1). Techniques of selecting, administering and evaluating inhalation and intravenous sedation agents. An introduction to general anesthesia will also be included. Clinical experience in inhalation and intravenous sedation is highly desirable.

610C Comprehensive Patient Care IV (1-10). The purpose of this course is to reinforce and refine patient management/treatment skills that students have been introduced to in D501C, D509C, D510C, and D609C. Students should be familiar with the criteria outlined in the Clinic Orientation Manual and respective Departments that will be used to evaluate their patient management/treatment performance. The student will have an opportunity of reaching final competency in all clinical skills, evaluation, patient management, ethics, problem solving, and decision making expected of a competent general dentist.

611C Fixed Prosthodontics Clinical I (1-2). Clinical application of principles taught in preceding terms.

613 Periodontal Treatment Planning (1).

614 Dentistry for the Special Patient (1-2). Special problems associated with dental care for handicapped, chronically ill, culturally variant, homebound, geriatric and institutionalized patients.

614C Comprehensive Patient Care V (1-10). A continuation of Comprehensive Patient Care IV.

617 Pediatric Dentistry Seminar (0.5). This course is designed to follow and build on the concepts presented in D431. Using a seminar format, students will review pediatric dentistry concepts with emphasis on clinical appkication. The course is intended for fourth year dental students who have had some initial clinical experience with pediatric patients. Offered: Fall

618 Dental Jurisprudence and Ethics (1). Legal aspects of dentistry to include dentist-patient and dentist-state relationships. Principles of ethics and the Missouri State Dental Laws are also covered.

622C Periodontics Clinical IV (1-2). Clinical application of those principles taught in preceding terms.

626 Clinical Treatment Planning (1). This course builds on the didactic courses and clinical experiences in treatment planning. Each student will demonstrate competency in comprehensive treatment planning to earn credit in the course. Offered: Fall

630 Practice Administration I (1). A consideration and evaluation of the various economic factors and managerial practices that affect the operational aspects of the practice of dentistry.

631 Practice Administration II (1). A lecture course which provides a working knowledge of basic practice management topics which will help future practitioners avoid many common mistakes. Specific business systems for manag ing a dental practice will be presented in a forum which encourages questions and dispels many common practice myths. A profitable private practice model will be presented that is designed to keep the fun in dentistry and minimize burn-out. Each student will then have the opportunity to build their own personal mode, or Personal Practice Blueprint, that will serve as their roadmap when creating their own practice. Upon completion, students should feel competent in running the business side of their practice and maintaining control over their business life. Resources for further study and ongoing support are also provided.

632C Oral Diagnosis Clinical IV (1-2). Clinical application of those principles taught in preceding terms.

633 Introduction to Dental Public Health (1). Discussion of contemporary issues in community health and community oral health with emphasis on preparing students for their roles as professional members of their communities.

634 Community-Based Dental Education I (1). The purpose of this course is to expose third and forth year dental students to alternative methods of dental care delivery to populations at high risk for dental disease. Specifically the course places junior and senior students in an existing network of community health centers and rural outreach sites where they deliver dental care while serving on multi-disciplinary teams that meet the primary health care needs of large segments of underserved populations. The long range goal is a practioner who is sensitive to diverse community needs. Prerequisite: Completion of Third Year Offered: Winter Semester Restrictions: Not eligible until completion of two clinical semesters-summer and fall of junior year.

635 Community-Based Dental Education II (1). A continuation of community-based dental education I (D-634). Prerequisite: Completion of Third Year Offered: Summer/Fall Semester Restrictions: Not eligible until completion of clinical requirements for the third year.

636C Oral Radiology Clinical (2). Clinical application of those principles taught in preceding terms with emphasis on use of a variety of film holding devices. Radiographic quality assurance and darkroom maintenance will be reviewed during this course.

641CR Operative Dentistry Clinical I (1-2). Clinical application of principles taught in preceding terms.

642C Operative Dentistry Clinical IV (1-2). Clinical application of those principles taught in preceding terms.

650 Applied Ethics (0.5). Four or five case studies will be used during seminars. Basic ethical principles from the D-306 course will be applied to the case studies. Two of the cases will involve ethical issues, and one of the cases will add community dentistry issues. Other cases will be used as generated or suggested by each seminar group.

656C Orthodontic Clinical I (1). The purpose of this course is to allow each student to develop the skills, knowledge and values to diagnose potential or actual malocclusions and manage patient who need orthodontic intervention. Offered: Fall

657C Orthodontic Clinical II (0.5). A continuation of Dent 656C.

660C Clinical Management III (1-10).

664CR Clinical Management IV (1-10).

665CR Clinical Management V (1-10).

680 Dental Occlusion IV (0.5). To review and reinforce the more theoretical information presented in the first year, give additional information and help students to further apply this information. This course will require a minimum of six weeks plus one lab/clinical for each student. A lecture/discussion format

will enable the students to more fully explore problems encountered in the clinic. Offered: Winter Semester.

690 Independent Study in Dentistry (1-6). This course provides students the opportunity to undertake independent study projects in specific areas of dentistry. Prior consent of instructor required. Course may be repeated.

691C Professional Development IV (0.5-3). Clinical application of those principles taught in preceding terms.

692C Professional Development V (1-2). Clinical application of those principles taught in preceding terms.

899 Required Enrollment (1).

Dentistry Biological Sciences Courses

700 Biomaterials Teaching (2). Through this course, students will acquire teaching experience in graduate and undergraduate biomaterials.

701 Engineering Principles of Dental Materials (2). The application of engineering principles to a description and understanding of the structure and properties of dental materials. Identification of engineering principles which are appropriate in the examination of the function of dental materials. Basic information, as well as current materials research will be discussed.

704 Temporomandibular Disorders: Evaluation and Management (2). Lecture and seminar course on the temporomandibular disorders, evaluation and management in light of behavioral, biological and environmental factors.

706 Growth and Development I (1). A course designed to teach the general principles of normal and abnormal physical, psychological and social growth and development of children and adolescents. The growth and development of the craniofacial structures is emphasized. The diagnosis of malocclusions is stressed. Consideration is given to possible approaches to their treatment.

707 Growth and Development II (1-2). A comprehensive study of the genetical aspects of growth and development with special analysis of the molecular control of these processes by both intrinsic and epigenetic factors. Prerequisite: Growth and Development I.

710 Molecular Genetics and Biochemistry of Cranial Facial Biology (2). Biochemistry of oral structures and the effect of oral diseases on these structures. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. programs.

711 Biochemical Endocrinology (2). An advanced study of the chemistry, metabolism, and mechanisms of hormone actions on molecular processes. Each hormone will be studied with respect to its site of origin, chemical properties, metabolism, disease entities, and mechanism of action on molecular processes. Prerequisite: BISC 710. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. program. Prerequisite(s): LSBIOC 710.

730 Oral Microbiology (2). The course will focus on rapidly developing areas of oral microbiology especially the etiology, prevention and treatment of oral disease. Topics will be selected by the instructor to reflect recent advances in research and to provide a critical examination of the current literature. Two hours lecture per week. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline- specific requirements for the Interdisciplinary Ph.D. program.

735 Advanced Immunology (2). This seminar course will focus on rapidly developing areas of modern immunology relevant to the health professions. Topics will be selected by the instructor to reflect recent advances in immunology and provide a critical examination of the current literature. Two hours lecture per week. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. program.

739 Dental Biomaterials for the Dental Specialist (1). Discussion of basic biomaterials principles and terminology including explanation of physical, mechanical and surface chemical properties, metallurgy, polymer chemistry, ceramics and composites. Clinical examples of how these principles apply to Prosthodontics, Pedodontics and Orthodontics will be presented. Students cannot take both this course and 742 for credit.

740 Oral Pathology I (2). A study of the clinical and histopathologic features of oral diseases, including inflammatory, degenerative, metabolic, and neoplastic diseases and developmental disturbances.

741 Oral Pathology II (2). A continuation of BISC 740.

742 Dental Biomaterials for the Restorative and General Dentist (2). A thorough discussion of basic biomaterials principles and how they apply to the practice of general and restorative dentistry. Students cannot take both this course and 739 for credit.

743 Advanced Seminar in Dental Biomaterials (1-2). The use and behavior of dental biomaterials in Pediatric Dentistry, Prosthodontics, Orthodontics, and

Restorative Dentistry will be discussed in depth. Current basic and clinical literature related to these areas will be discussed and research information to improve dental practice will be presented. Prerequisite: BIO SCI. 739 or 742 and permission of instructor.

747 Research Instrumentation Used in Dental Biomaterials (2-4). A discussion and laboratory use of instrumentation employed in dental biomaterials research. Practical hands-on experience will include calibration and use of specific research equipment including the Instron, metallurgical mounting and polishing equipment, measuring microscope, metallograph, and contact angle gonemeter. Prerequisite: Permission of instructor.

749 Special Problems in Oral Pathology (1-2). The student will review surgical cases and literature pertinent to those cases under the guidance of faculty members of the department.

750 Special Problems in Dental Biomaterials (2-4). The student will select or be assigned a special research problem including appropriate literature reviews of a special topic in dental biomaterials. Emphasis will be placed on the correlation between basic and clinical research. The design and conduct of clinical research will be discussed. Prerequisite: Permission of instructor.

751 Elements of the Scientific Method (1). Students enrolled in the Masters of Science in Oral Biology program are required to attend this weekly seminar series every semester. The course is offered during their matriculation in the program. Attendance is open to other students and faculty. Research presentations will cover a variety of biological, engineering and psychological disciplines relevant to dental education and the dental profession. Presentations will be by faculty and students. Fall and Winter semesters. (Day, time and place to be determined).

752 Research Methods in Oral Biology (1-5). A continuation of BISC 751.

759 Special Problems in Pharmacology (2). Pharmacologic and therapeutic problems of special interest in the practice of dentistry.

760 Physiology of Oral Hard Tissues (2). A study of the physiology of the oral hard tissues with emphasis on the mechanisms of the growth, remodeling, and healing of maxillomandibular bones and on the mechanism of dentinogenesis. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. program.

780 Teaching of Dentistry (1-2). A consideration of the problems of teaching in dental schools. Each department of the School of Dentistry will report on its teaching methods. The student will observe lectures and laboratory teaching in each department.

781 Clinical Student Teaching I (1-2). This course is designed to give the student teaching experience in conducting and supervising predoctoral students in their clinical practice. Diagnosis and treatment planning in each specialty field will be emphasized.

782 Clinical Student Teaching II (1-2). A continuation of BISC 781.

790 Directed Research in Oral Biology (1-6). Student utilizes beginning research skills to design, conduct and report an individual research project under the direction of the faculty.

799 Research and Thesis (1-9). The satisfactory completion of an original research project. Results of the research and critical review of the pertinent literature are incorporated into a thesis. Credit is awarded after the student's thesis is successfully defended and accepted by the School of Graduate Studies.

801 Readings in Immunology (1-3). A detailed study of special topics in immunology. Specific topics to be arranged with the instructor. This course may be repeated by doctoral students for a maximum of 3 credit hours. Prerequisite: LS 435.

802 Immunopathology (2). A detailed study of selected topics in immunopathology with emphasis on physicochemical barriers such as cutaneous and mucosal immune systems. Prerequisite: LS 435.

805 Molecular Biology of Oral Microflora (2-3). Lecture and discussion. An overview of the ecology of oral microbial flora and its role in oral health; bacterial virulence factors and pathogenesis; mechanisms of gene expression in oral bacteria; and the effect of recent advances in molecular biology on oral diagnosis and treatment. Permission of Instructor Required for registration. The basic course will meet twice a week and be 2 credit hours. An optional additional credit can be earned by writing a research paper on a pertinent topic in Oral Molecular Microbiology.

806 Oral Microbiology and Infectious Disease (1-2). A detailed study of oral microbiology with a particular emphasis on dental plaque formation and bacterial infection in dental caries. The role of bacterial genetics in the diagnosis, prevention, and treatment of diseases involving the oral maxillofacial complex, bacteremia and endocarditis will also be discussed. Prerequisite: LS 4180.

830 Structural Charaterization of Dental Biomaterials (4). A detailed study of the techniques commonly used to determine the composition and structure of dental biomaterials. Surface and near-surface characterization techniques will be emphasized. The student will be expected to complete laboratory projects on the scanning and transmission electron microscopies available in the School of Dentistry. Two hours lecture and two to six hours laboratory per week. Prerequisite: Biosc 701.

899 Required Graduate Enrollment (1).

Endodontics Courses

701 Endodontology 1 (1-6). This course is designed to introduce the first year endodontic postgraduate student to the field of advanced endodontics. It will provide introductory information and guidance which will serve as a basis for follow on course work in ENDO 702 through ENDO 706. Prerequisite: None

702 Endodontology 2 (1-6). This course is designed to continue the transition of the general dentist into a first year endodontic postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident. Prerequisite: None

703 Endodontology 3 (1-6). This course is designed to complete the transition of the general dentist into a first year endodontic postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new materal to the resident. Prerequisites: ENDO 701 & 702 Offered: On demand

704 Endodontology 4 (1-6). This course is designed to transition the first year into a second year postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident. Prerequisites: ENDO 701, ENDO 702, ENDO 703.

705 Endodontology 5 (1-6). This course is designed to continue the transition of the general dentist into a more proficient second year postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident. Prerequisites: ENDO 701, ENDO 702, ENDO 703, ENDO 704

706 Endodontology 6 (1-6). This course is designed to complete the transition of the general dentist into a fully independently practicing endodontist. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident. Prerequisite: ENDO 701, ENDO 702, ENDO 703, ENDO 704, ENDO 705

General Practice Courses

710 Principles of Pedodontics for General Practice (2). A lecture course presenting the basic concepts of diagnosis and treatment of the child in a general dental practice.

716 Special Problems in General Practice Dentistry I (1-6). Courses designed to provide the student with opportunities to work with consultants and specialists on the faculty of the dental school on cases which require the attention of a specialist.

717 Special Problems in General Practice Dentistry II (1-6). A continuation of GNPR. 716.

718 Special Problems in General Practice Dentistry III (1-6). A continuation of GNPR 717.

721 General Practice Clinic I (1-10).

722 General Practice Clinic II (1-10).

723 General Practice Clinic III (1-10).

724 Hospital Residency in General Practice IV (2).

725 Hospital Residency in General Practice V (4).

726 Hospital Residency in General Practice VI (4).

727 General Practice Clinical Pedodontics (1). Clinical training in treating normal and handicapped children at Children's Mercy Hospital. Training includes providing treatment under general anesthesia at the hospital.

728 Dental Implantology (1). The course is designed to include the following topics: history of implantology, implant materials and designs, fibro- osseous and osseo-integration theories, bioinert and bioactive retention, indication and case selection, technique methodology, anatomical considerations and reasons for failure, prosthetic considerations using several systems and necessary radiographic aids, surgical stent and laboratory with simulated insertion of an implant.

729 Oral Endosteal Implantology II (2). A continuation of GNPR. 728.

730 Introduction to Periodontology (1-2). This course is designed to introduce graduate students who are not enrolled in the periodontics program to various current philosophies and clinical applications of Periodontics including etiology, diagnosis, pathogenesis and various treatment modalities in current use.

731 Principles of Minor Tooth Movement (2). This lecture and laboratory course gives the non-orthodontic student an introduction to craniofacial growth and development physiology of the stomatognathic system, to etiology, incidence, recognition and unfavorable sequelae of malocclusion, and to the fabrication of removable and fixed- banded appliances necessary for the correction of minor irregularities.

732 Intravenous and Inhalation Sedation (2). A comprehensive study of nitrous oxide and valium sedation combining lectures and clinical problems.

740 Interdisciplinary Seminar I (1). The integration of common areas of concern in the clinical disciplines of Oral and Maxillofacial Surgery, Orthodontics, Pediatric Dentistry, Periodontics and Prosthodontics as they relate to patient cases. Cases are presented that present problems in at least two clinical disciplines in the areas of Diagnosis, Treatment Programming or Therapy. The current literature is reviewed and the case discussed.

741 Interdisciplinary Seminar II (1). A continuation of GNPR 740.

742 Interdisciplinary Seminar III (1). A continuation of GNPR 741.

743 Interdisciplinary Seminar IV (1). A continuation of GNPR 742.

799 Research and Thesis (1-6). The satisfactory completion of an original research project. Results of the research and critical review of the pertinent literature are incorporated into a thesis.

899 Required Graduate Enrollment (1).

Oral Biology Courses

699 Dissertation Research (1-12). Ph.D. dissertation research.

700 Embryonic Development of the Face and Oral Cavity (2). The course presents an in-depth review of the embryonic development of the face, ears, tongue, mandible, maxilla, and teeth and their associated tissues. In addition, the histology of bone and cartilage, both formative and mature, will be discussed at light and electron microscopic levels. Offered: On Demand.

807 Structure and Properties of Calcified (2). an introduction to the development of calcified tissues as hierarchical structural/material systems. Starting at the cellular level, bone modeling, remodeling and mechanisms of mineralization will be introduced to be followed by analyzing bone's structural hierarchy and its effects on anisotropic material properties. Fracture mechanisms, viscoelastic and composite properties also will be studied. Expermental techniques measuring various material properties of these tissues will be introduced and/or demonstrated where appropriate. Prerequisite: Consent of instructor.

899 Required Graduate Enrollment (1).

Oral Radiology Courses

704 Oral Radiology Residency I (1-5). Clinical and didactic study of oral radiology.

705 Oral Radiology Residency II (1-5). Clinical and didactic study of oral radiology.

706 Oral Radiology Residency III (1-5). Clinical and didactic study of oral radiology.

707 Oral Radiology Residency IV (1-5). Clinical and didactic study of oral radiology.

708 Oral Radiology Residency V (1-5). Clinical and didactic study of oral radiology.

709 Oral Radiology Residency VI (1-5). Clinical and didactic study of oral radiology.

716 Special Problems Oral Radiology I (1). Assigned technical problems in oral radiology.

720 Advanced Radiographic Anatomy (1). Correlation between normal anatomic structures of the head and neck region and the radiographic appearance of these structures on intraoral, panoramic, skull and conventional tomographic projections.

721 Advanced Radiographic Interpretation (2). Radiographic interpretation of normal and pathologic processes of the oral and maxillofacial region. Developmental, degenerative, inflammatory, neoplastic, and metabolic conditions of the oral and maxillofacial complex are covered, including conditions involving the temporomandibular joint and paranasal sinuses.

722 Radiation Physics (2). Basic principles of radiation physics in relation to medical and dental diagnostic radiology are presented. Topics such as the nature of radiation, x-rays and their production, interaction of x-rays with matter, measurement of x-rays, x-ray film and intensifying screens, and image characteristics are presented.

723 Radiation Biology (2). This course covers the basic principles of radiation biology, as well as radiation safety and protection. Topics such as theories of radiation action, radiation chemistry, molecular, cellular and tissue effects, early and late effects of radiation, effects of radiation therapy on the

oral cavity, and concepts of radiation protection and risk assessment are presented. Satisfactory completion of a project in the area of radiation biology is required for the additional credit hour.

724 Advanced Imaging Modalities (2). This course will cover basic principles and interpretation of advanced imaging modalities, such as computed tomography, digital radiography, magnetic resonance imaging, nuclear medicine and ultrasound. Applications of these imaging modalities to dentistry will be addressed. Prerequisite: OR RAD 722.

Oral Surgery Courses

700 Principles of Oral Surgery I (1). A conference on diagnosis, treatment planning, surgical technique.

701 Principles of Oral Surgery II (1). A continuation of ORSG. 700.

702 Principles of Oral Surgery III (1). A continuation of ORSG. 701.

703 Principles of Oral Surgery IV (1). A continuation of ORSG 702.704 Clinical Oral Surgery I (3). The clinical application of the principles of

diagnosis, treatment planning, and surgical techniques. **705 Clinical Oral Surgery II (3).** A continuation of ORSG. 704.

706 Clinical Oral Surgery III (3). A continuation of ORSG. 705.

707 Physical Diagnosis for the Oral & Maxillofacial Surgeon I (1). Basic physical diagnosis and review of systems as it relates to the practice of Oral and Maxillofacial Surgery.

708 Physical Diagnosis for the Oral & Maxillofacial Surgeon II (1). Advanced physical diagnosis and review of systems as it relates to the practice of Oral and Maxillofacial Surgery.

709 Physical Diagnosis for the Oral & Maxillofacial Surgeon III (1). Oral and Maxillofacial Surgery and the medically compromised patient.

710 Physical Diagnosis for the Oral & Maxillofacial Surgeon IV (1). A continuation of ORSG 709.

711 Physical Diagnosis for the Oral & Maxillofacial Surgeon V (1). A continuation of ORSG 710.

712 Physical Diagnosis for the Oral & Maxillofacial Surgeon VI (1). A continuation of ORSG 711.

713 Advanced Physical Diagnosis for Oral & Maxillofacial Surgeon I (1). Advanced physical diagnosis and review of systems as it relates to the practice of Oral and Maxillofacial Surgery.

714 Advanced Physical Diagnosis for Oral & Maxillofacial Surgeon II (1). A continuation of ORSG 713.

715 Advanced Physical Diagnosis for Oral & Maxillofacial Surgeon III (1). A continuation of ORSG 714.

716 Special Problems in Oral and Maxillofacial Surgery I (1).

717 Special Problems in Oral and Maxillofacial Surgery II (1).

718 Special Problems in Oral and Maxillofacial Surgery III (1).

719 Special Problems - Oral & Maxillofacial Surgery IV (1). A continuation of ORSG 718.

720 Oral Surgery Hospital Residency I (1). Two calendar years of hospital residency in an affiliated teaching hospital. The residency provides additional training in major oral surgery and didactic education in oral surgery and science areas, including anesthesiology, diagnosis, pathology, and radiology.

721 Oral Surgery Hospital Residency II (1). A continuation of ORSG. 720.

722 Oral Surgery Hospital Residency III (1). A continuation of ORSG. 721.

723 Oral Surgery Hospital Residency IV (1). A continuation ORSG. 722.

724 Oral Surgery Hospital Residency V (1). A continuation of ORSG. 723.

725 Oral Surgery Hospital Residency VI (1). A continuation of ORSG. 724.

726 Tumor Surgery of the Head and Neck (2). A discussion of tumors of the head and neck and the surgical treatment of these diseases.

727 Major Oral Surgery I (2). A comprehensive study of major oral surgery. Lectures are correlated with surgical exercises which are performed in the anatomy laboratory.

728 Major Oral Surgery II (2). A continuation of ORSG. 727.

729 General Anesthesiology and Pharmacology I (1). The pharmacological principles of the various anesthetic agents and allied medications.

730 General Anesthesiology and Pharmacology II (1). A continuation of ORSG. 729.

731 Clinical General Anesthesiology and Pharmacology I (2). The clinical application of various anesthetic and pharmacological agents.

732 Clinical General Anesthesiology and Pharmacology II (2). A continuation of ORSG. 731.

733 Clinical General Anesthesiology and Pharmacology III (2). A continuation of ORSG. 732.

734 Clinical/Major General Anesthesiology and Pharmacology I (1). The clinical/major surgical application of various anesthetic and pharmacological agents.

735 Clinical/Major General Anesthesiology and Pharmacology II (1). A continuation of ORSG 734.

736 Clinical/Major General Anesthesiology and Pharmacology III (1). A continuation of ORSG 735.

737 Pediatric General Anesthesiology and Pharmacology I (1). The pharmacological principles of various anesthetic agents and allied medications in the pediatric patient.

740 Oral & Maxillofacial Surgery Independent Study (1-6). An advanced study and/or elective course in Oral and Maxillofacial Surgery related field(s) which enhances the compulsory curriculum.

752 Seminar in Oral Surgery I (1). A discussion of current literature and research relating to oral surgery.

753 Seminar in Oral Surgery II (1). A continuation of ORSG. 752.

754 Seminar in Oral Surgery III (1).

755 Seminar in Oral Surgery IV (1). A continuation of ORSG 754.

Orthodontics Courses

704 Orthodontics and Dentofacial Orthopedics I (1-6). Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

705 Orthodontic and Dentofacial Orthopedics II (1-6). A continuation of ORTH. 704.

706 Orthodontics and Dentofacial Orthopedics III (1-6). A continuation of ORTH. 705.

707 Orthodontics and Dentofacial Orthopedics IV (1-6). A continuation of ORTH. 706.

708 Orthodontic and Dentofacial Orthopedics V (1-6). A continuation of ORTH. 707.

709 Orthodontic and Dentofacial Orthopedics VI (1-6). A continuation of ORTH 708

710 Orthodontic and Dentofacial Orthopedics VII (1-6). A continuation of ORTH. 709.

711 Orthodontics and Dentofacial Orthopedics VIII (1-6). A continuation of ORTH. 710.

726 Cephalometric I (2). An introductory lecture and laboratory course in the principles of radiographic cephalometry and integrated cephalometric analysis. **727 Cephalometric II (2).** An advanced lecture and laboratory course with emphasis on the use of a computer in cephalometric analysis.

Pedodontics Courses

899 Required Graduate Enrollment (1).

Pediatric Dentistry Courses

700 Principles of Pediatric Dentistry I (1-3). Lecture and discussion of the principles of children's dentistry. The subject matter consists of the prevention of disease, child cooperation, diagnosis and treatment planning, treatment and post-treatment procedures.

701 Principles of Pediatric Dentistry II (1). A continuation of PEDS 700.

720 Pediatric Dentistry Hospital Residency I (1). (1). The clinical activities of the program are conducted at Children's Mercy Hospital. Students spend 24 months (6 semesters) as residents in the Department of Pediatric Dentistry. Patient care is provided both in the outpatient clinic and to hospital inpatients. Rotations in anesthesia, pediatrics, and the emergency room are included in the residency. Residents participate on several multidisciplinary teams at the hospital including the Cleft Palate Team, Crainiofacial Anomalies Team, Hemophilia Team, Care Team, Sickle Cell Anemia Team, and the Newborn Intensive Care Follow-up Clinic.

721 Pediatric Dentistry Hospital Residency II (1). A continuation of PEDS 720.

722 Pediatric Dentistry Hospital Residency III (1). A continuation of PEDS 721.

728 Cleft Palate Problems-Team Approach (1). (1). Presentations by the members of the Cleft Palate Team at Children's Mercy Hospital. The role of genetics, speech, audiology, ENT, oral surgery, plastic surgery, orthodontics, pediatric dentistry, prosthodontics, social services, nutrition, and child psychology in the rehabilitation of the cleft palate patient will be discussed.

Periodontics Courses

700 Periodontic Residency I (1-2). Didactics, Seminars in Basic Periodontics with Clinical Practice.

701 Periodontic Residency VII (1-2). Didactic and Seminar in Periodontics with Clinical Practice.

702 Periodontic Residency II (1-6). Clinical Periodontics with related didactic and seminar.

705 Periodontal Residency III (1-6). Clinical Periodontics with Related Didactics and Seminars.

706 Periodontics Residency III (1-6). A continuation of PERO. 705.

707 Periodontic Residency IV (1-6). Clinical Periodontics with Related Didactics and Seminar.

708 Periodontic Residency V (1-6). Clinical Periodontics with Related Didactics and Seminar.

709 Periodontic Residency VI (1-6). Clinical Periodontics with Related Didactics and Seminar.

716 Periodontic Residency IX (1). Didactic in Surgical Periodontics with Clinical Practice.

717 Special Problems in Periodontics II (1). A continuation of PERO. 716. **718 Special Problems in Periodontics III** (1). A continuation of PERO. 717.

720 General Anesthesia (1). A rotation to the Department of Anesthesiology of K.C. Veterans Administration Medical Center. Students become familiar with operating room procedures, medical emergencies, venipuncture, airway maintenance and pharmaco-physiology of sedative, analgesic and anesthetic agents as well as drug interactions.

727 Introduction to Internal Medicine and Diagnosis I (1). A seminar on internal medicine, physical diagnosis, laboratory medicine, dermatology and allergy. This course is designed to give the resident a broad knowledge of the above.

728 Introduction to Internal Medicine and Diagnosis II (1). A continuation of PERO. 727.

729 Children's Periodontics (2). Children's periodontal disorders, etiology, diagnosis, and treatment. Emphasis is placed on preventive periodontics and on education of parents and children in oral physiotherapy.

730 Biology of the Periodontium (1-2). Biology of the Periodontium covers the embryology, histology, ultrastructure and biochemistry of stratified squamous epithelium, fibrous connective tissue, bone and cementum. These four tissues are studied in health and during inflammatory disease and healing of surgical wounds. Major emphasis is placed on immune system interactions with bone and fibrous connective tissue components during inflammatory periodontal disease.

751 Seminar in Periodontics I (2). A discussion of the classic and pertinent periodontal literature.

752 Seminar in Periodontics II (2). A continuation of PERO. 751.

753 Seminar in Periodontics III (2). A continuation of PERO. 752.

754 Seminar in Periodontics IV (2). A continuation of PERO. 753.

755 Seminar in Current Periodontal Literature/Treatment Planning V (2). A discussion of the current research and literature relating to periodontics and the utilization of current knowledge to patient treatment planning.

756 Seminar in Current Periodontal Literature/Treatment Planning VI (2). A continuation of PERO. 755.

757 Seminar Current Periodontal Literature & Treatment Planning VII (2). A continuation of PERO. 756.

758 Seminar Current Periodontal Literature & Treatment Planning VIII (2). A continuation of PERO. 757.

799 Research and Thesis (1-6).

899 Required Graduate Enrollment (1).

Preventive Dentistry Courses

700 Preventive Dentistry (2). Investigates the known factors affecting oral disease. Major attention is given to a critical review of the current dental literature (epidemiological, clinical investigations, laboratory experiments), to determine which are the most effective preventive and control measures for patients.

710 Dental Public Health (2). Discussion and analysis of current research, of government policies and programs, and of trends in professional practice and education of significance in public health and dental public health.

711 Residency in Public Health I (1-9).

799 Research and Thesis (1-6).

Research Methodology - Dentistry Courses

700 Introduction to Research Methodology (2-3). A lecture/seminar format which focuses on the critical analysis of scientific literature and on a conceptual understanding of statistical techniques and designs commonly used in dental research. A final paper and presentation representing the critical analysis of a student selected segment of the dental literature is required.

701 Topics in Advanced Research Methodology (2-4). A lecture/seminar course on selected advanced research methodology topics which are to be determined in conjunction with participants. Such topics may include advanced experimental designs in the literature, etc. Prerequisite: Permission of instructor.

702 Special Problems in Research Methodology (2-4). A student will work with a faculty member on methodological aspects of a research proposal or project. Prerequisite: Permission of instructor.

703 Thesis Writing (1). The methods of preparing, organizing, and presenting research findings according to the format of scientific writing.

704 Introduction to Biostatistics (2-3). A lecture/seminar course required for students pursuing a master's degree. This course focuses on an in-depth coverage of statistical designs commonly found in dental research, statistical techniques associated with these designs, their application to them via the use of a computer based statistical software analysis package, and the development and submission of a written research protocol. Prerequisite(s): RESM 700.

705A Design of Clinical Research Studies (2). Students enrolled in this course will learn the elements of a good clinical research study. Additionally, students will develop a draft protocol for a clinical research project, estimate time and budget needs for the project, and be sensitive to ethical issues in the conduct of clinical research.

705B Statistical Analysis for Clinical Research (2). Techniques for analyzing complex clinical research designs are a major focus of this course. Students will also learn analytic techniques for estimating failure in biomaterials as well as epidemiologic techniques.

705C Introduction to Statistical Software (2). Students enrolled in this course obtain hands-on experience with comprehensive statistical analysis programs, including SPSS and SAS. Students will learn to establish and verify data files, generate program files, and develop strategies for documenting files for improved accountability and reproducibility.

Restorative Dentistry Courses

700C Principles of Fixed Prosthodontics I (1). 701C Principles of Fixed Prosthodontics II (1). 799 Research and Thesis (1-6).

School of Education

347 School of Education 615 E. 52nd Street (816) 235-**2236** Fax: (816) 235-**5270** education@umkc.edu http://www.umkc.edu/education

Mailing Address

University of Missouri-Kansas City School of Education 5100 Rockhill Road Kansas City, MO 64110-2499

Interim Dean:

Linda L. Edwards

Assistant Deans:

Jerry Cooper, Bruce Jones, Lori Reesor

Division of Counseling and Educational Psychology Chair: Nancy Murdock

- Division of Curriculum and Instructional Leadership Chair: Sue Vartuli (Interim)
- Division of Urban Leadership and Policy Studies Chair: Dianne Smith

Director of Teacher Education: Susan Adler

History

The School of Education, organized officially as a separate academic division in 1954, was the result of the University of Kansas City's involvement in professional education since 1940. At that early date the University was offering an M.A. in education, heavily liberal-arts laden, with most classes conducted in the summer and evenings. An undergraduate major in elementary education was established in 1952, and the first University of Kansas City doctoral program, the Ph.D. in education, was inaugurated with the organizing of the school in 1954. Since 1954, the school has grown to include three disciplinary divisions with 18 programs, offering bachelor of arts, master of arts, educational specialist and doctor of philosophy degree programs. Several degree and certification programs are offered in cooperation with the the School of Biological Sciences, the Conservatory of Music and the College of Arts and Sciences.

Mission

The mission of the School of Education is that of empowering professionals as reflective practitioners committed to a more just and democratic society. This mission is centered on five key values which embody the knowledge, skills and dispositions expected of our candidates across the School of Education. The goals defined by individual programs are more specific subsets of these broader goals:

- 1. Academic excellence
- 2. Inquiry leading to reflective decision-making and problem-solving
- 3. Skilled and knowledgeable professionals working collaboratively
- 4. Democracy and social justice
- 5. Creating caring and safe environments

Curricula Objectives

The overall goal of the School of Education is the development of broadly educated, competent practitioners who are able to engage in critical and cooperative inquiry rather than act merely as functionaries in an education system. The school aspires to provide for an increasing diversity of educational specialists who are grounded in both theory and practice and can deal effectively with the problems and needs of a culturally, socially and politically diverse society.

The primary objectives of the School of Education, which stem from our conceptual framework, mission, and values, are:

- To provide sound theoretical foundations and practical skills at the undergraduate and graduate levels required for competent performance by teachers, administrators and special-services personnel in schools, colleges and universities in a culturally pluralistic society;
- To provide graduate education and research skills which are supportive of and lead to advanced levels of scholarly achievement;
- To provide a diversity of specialized educational and training programs for persons engaged in educational roles in non-school settings such as governmental agencies, social service agencies, mental and physical health care institutions, business and industrial organizations, and private practice;
- To provide leadership, consultation and other support services for quality improvement in planning and conducting educational programs in schools, higher education institutions and community agencies and organizations;
- To provide professional development opportunities for educators at all levels through specially designed programs in research, continuing education instruction, in-service programs and workshops;
- To impact the student learning in classrooms and communities throughout Missouri and the region in positive and meaningful ways; and
- To make original contributions to the broad field of professional education through basic and applied research by both faculty and students.

Accreditation

The teacher education programs of the School of Education are accredited at the bachelor's, master's, educational specialist and doctoral levels by the National Council for Accreditation of Teacher Education for the preparation of elementary teachers, secondary teachers and other school personnel.

The School of Education is a member of the American Association of Colleges of Teacher Education.

The Ph.D. program in Counseling Psychology is accredited by the American Psychological Association.

Programs for the preparation of teachers and other school personnel are approved by the Missouri Department of Elementary and Secondary Education.

Advising and Student Services

The Office of Student Services is a referral and resource for all students in the School of Education (including pre-education majors). While the primary responsibility of student services is to provide quality advising for undergraduates, the staff serve all School of Education students with certification, other adminstrative forms, scholarships, and referrals. Advising for graduate students is handled by the faculty within the apporopriate division. The goal of Student Services is to provide support and referral services to students in the School of Education to facilitate a successful academic experience.

The Office of Student Services provides enhanced communication between students and other campus offices. The office is charged with coordinating the school's commencement ceremony and other student-centered activities. The office staff also works with the School of Education's student organizations to provide programming of interest to all School of Education students.

Scholarships and Fellowships

The School of Education has the following named scholarships to offer students enrolled in an education degree program. All scholarships are formally announced in January, with selection completed in March for awarding the following academic year. Application materials are available in January from the Education Student Services Office. All scholarship recipients are selected by the School of Education Scholarship Committee.

College Club Esther Teague Scholarship

This scholarship was established by the College Club in honor of longtime kindergarten teacher, Esther Teague. Scholarships are awarded to deserving education majors entering their final year of teacher education.

Kansas City Elementary Teachers' Club Scholarship

This scholarship, endowed by the Kansas City Elementary Teachers' Club, is for elementary or secondary education majors preparing to student teach.

Lena and Haddon Hill Scholarship

Endowed by Professor Emeritus Shirley A. Hill in honor of her parents in 1993, this scholarship is awarded to students who plan a career teaching mathematics at any level. Preference is given to females.

Pallas K. Cockefair Scholarship

This scholarship was established to assist full-time students in the teacher education program.

Wheadon Bloch Scholarship

Established in 1990 in honor of Professor Emeritus Wheadon Bloch, this scholarship supports a graduate student who has excellent academic, research and leadership skills. Preference given to students in Higher Education Administration.

Patricia J. Gier Memorial Scholarship

In recognition of Patricia J. Gier, this scholarship is available to an undergraduate or graduate student pursuing a degree in teacher education. Preference may be given to a non-traditional female student.

Dr. Phyliss L. Bernstein Scholarship

Doctoral students currently enrolled in the School of Education's Counseling Psychology Program may apply. Criteria for selection include academic achievement, financial need and skills in interpersonal relations as demonstrated by leadership in campus or community involvement.

Hazel Browne Williams Scholarship

A scholarship for minority education students was established in honor of Hazel Browne Williams, the first black female professor at the University of Kansas City and the School of Education.

Hugh Speer Fellowship

Established to honor the first dean of the UMKC School of Education, the Hugh Speer Fellowship provides financial support for graduate students who are community college employees or are interested in studying community college administration.

Ruth G. & Phillip W. Snyder Scholarship

A scholarship is awarded annually to an elementary education major or someone involved in elementary schools.

George and Grace Fox Fellowship

This fellowship was established to assist a doctoral student interested in preparing for a career in the correction and prevention of reading disabilities in a college, university or public school setting. The recipient carries out research and scholarly activities under the direction of language and literacy faculty.

George and Grace Fox Scholarship

This scholarship was established to assist students interested in preparing for a career in the correction and prevention of reading disabilities in a college, university or public school setting.

Helen Lee Stevens Scholarship

Established to honor a pioneer faculty member in counseling psychology, the Helen Lee Stevens scholarship is awarded to entering counseling psychology doctoral students who demonstrate excellent academic potential. The faculty of the Division of Counseling, Educational Psychology and Exercise Science name the recipient of this award. There is no application.

UMKC School of Education Alumni Association Board Scholarship

This scholarship was established through the diligence of the School's Alumni Association. A deserving graduate student in the School of Education is awarded the scholarship annually.

Patricia J. Campobello McSwegin Memorial Scholarship

In recognition of a dynamic exercise science educator, Dr. Pat McSwegin, this scholarship is awarded to a student enrolled in a Physical Education program. Dr. McSwegin stipulated that recipients have completed at least 15 hours of physical education coursework; have a 3.0 grade-point average; and have experience working with children or adults in a fitness, recreation, sport or sports-medicine setting. Undergraduate physical education students will receive first consideration.

Warren H. Wheelock Scholarship

Established in 1994 to honor Professor Warren Wheelock, this scholarship supports a pre-service teacher who is familiar with the principles and practices of sound reading instruction and who is committed to a prevention model philosophy.

Loan Fund - Russell W. and Christine Elliott Loan Fund for Minority Students

The Elliotts' desire was to assist minority education students in need of short-term financial assistance. Low interest, short-term loans may be sought via the dean's office by students currently enrolled in a degree program.

Josephy & Gwen Speyer Scholarship

This scholarship will be awarded to a student enrolled in Special Education's master's program who demonstrates commitment to the field and finacial need.

Student Organizations

The School of Education Student Government strives to expand the students' academic concerns and abilities; promote students' involvement in the School of Education and the University; act on all matters concerning students' welfare; aid faculty and students in cooperative work, and promote a professional attitude and feeling of responsibility.

The American Psychological Association – Student Affiliate Group encourages professional development within the field of counseling psychology. It also serves as a meeting time for the members to discuss issues and concerns of the counseling psychology doctoral program. It encourages students to organize educational, social and fund-raising events, and to act as a liaison with the counseling psychology faculty and the UMKC community.

The Kansas City Council of the International Reading Association works closely with the Division of Curriculum and Instructional Leadership and language and literacy faculty to provide programs that acquaint teachers and administrators with issues, special methods and materials in the field of reading education. *Pi Lambda Theta* recognizes persons of superior scholastic achievement and high potential for professional leadership; to stimulate independently thinking educators who can ask critical questions to improve educational decision-making.

The purpose the *Student Personnel Association* is to create a sense of community among students interested in the study of higher education by providing opportunities to interact with each other and discuss common issues and concerns, encouraging social unity, and promoting the educational development of members.

Phi Delta Kappa is an honorary education society with the purpose of improving schooling through research and shared information. The national organization publishes high-quality materials in the field of education, and the local chapter sponsors workshops, informational meetings and service projects.

The *Student Missouri State Teachers Association* promotes professional ideals by developing communication, interaction and cooperation among existing chapters; coordinating their major activities, projects and programs; aiding in the establishment of new chapters, and establishing and meeting Student-MSTA membership goals. Activities provide personal growth, leadership training and experiences. The activities also provide opportunities by which students may observe and share the work of the teachers in every aspect. This is to promote and cultivate high quality teaching in the education profession.

Special Services

Reading Clinic

Diagnostic and remedial services in reading are available for elementary and high school students who are having difficulty in reading. Contact the Division of Curriculum and Instructional Leadership at (816) 235-**2245** for additional information.

Internships

Supervised graduate internships are available in such specialized areas as reading, educational research, teaching the disadvantaged, counseling and guidance, counseling psychology, school administration, supervision and higher education. The internship experiences are planned cooperatively by interns, field supervisors and UMKC supervisors. A seminar is included. Placements must be approved by the faculty adviser and the division in which the student is a degree candidate.

Assistantships

A limited number of graduate assistantships with stipends of varying amounts are awarded each year in programs and units of the School of Education, such as curriculum and instructional leadership, reading, research, administration, and counseling psychology.

Research projects, especially those funded by grants and contracts, provide additional student assistantships. Awards are based largely on academic distinction and partly on need. Assistants are required to perform services of an academic nature. Grantees receive a waiver of out-of-state tuition and reduced incidental fees. Application forms are available in the School of Education Student Services Office, Room 245.

Library Facilities

Education books and journals, especially those pertaining to current issues and fully indexed periodicals, are continually and systematically added to the University's Miller Nichols Library. The serial holdings include more than 90 percent of the listings in the Education Index for the past 10 years. Current information is available at

http://www.umkc.edu/library. The education section of the Kansas City Public Library, the Truman Presidential Museum

& Library and the Linda Hall Library of Science and Technology (adjoining the campus) provide valuable supplements to the UMKC facilities.

Public School Centers

A number of public schools in the Kansas City metropolitan area cooperate with the School of Education by making available their facilities and staffs for observations, student teaching and demonstrations. These schools are designated centers because of the close relationships that have been developed between UMKC and public schools. The use of the centers ensures that observations and student teaching are closely interwoven with the coursework throughout the program to provide close union of theory and practice. During student teaching, students are under the guidance of cooperating teachers and members of the University's education staff. Weekly seminars are a required part of the program.

Placement

There is a significant local and national demand for teachers. More than 7,000 teaching positions exist in the greater Kansas City area. In addition to those local opportunities, School of Education graduates hold teaching positions across the nation.

Students or graduates seeking a teaching or administrative position are urged to register and keep their records current in the Career Services Office, 4825 Troost, phone (816) 235-**1636** or check their Web site: http://www.umkc.edu/careers.

Computer Laboratory

The School of Education Computer Laboratory is available for all UMKC students and School of Education faculty. Computers with the PC and Mac platforms are available.

Office of Continuing Education

Through Continuing Education, hundreds of courses are offered to teachers and other community members throughout the Greater Kansas City area. Courses are offered throughout the year at numerous locations and in various time frames. For additional information, call (816) 235-**1188** or visit their Web site at http://www.umkc.edu/education.

Division of Counseling and Educational Psychology

Chair:

Nancy Murdock, Ph.D. (816) 235-**2722**

Areas of Study and Degrees

- M.A. Counseling and Guidance; Emphasis Areas: School Counseling, Mental Health, Couples and Family, and Substance Abuse
- Ed.S. Counseling and Guidance; Emphasis Areas: School Counseling, Mental Health, Couples and Family, Substance Abuse
- Ph.D. Counseling Psychology

Faculty Scholastic Activity and Research Interests

The diverse faculty in Counseling and Educational Psychology have a wide variety of experiences and interests. Faculty members conduct research on counseling-related issues and career development, operate grant programs, conduct evaluations of education programs, and see clients for therapy. Attention to multicultural issues is paramount to the division, and faculty attend to multiculturalism in both coursework and research. They advise students in research, evaluation, and counseling endeavors, and help them achieve their educational goals.

Division of Curriculum and Instructional Leadership

Interim Chair: Sue Vartuli, Ph.D. (816) 235-**2241**

Areas of Study and Degrees

- B.A. Early Childhood Education
- B.A. Elementary Education
- B.A. Middle School Education (Science, English, Mathematics, Social Studies)
- B.A. Secondary Education; Certification areas: Art, English, Foreign Language (French, German, Spanish), General, Mathematics, Natural Sciences (Biology, Chemistry, Earth Science, Physics) and Social Sciences
- M.A. Curriculum and Instruction; Emphasis Areas: Subject Matter Specialty, Elementary, Early Childhood, General, Multicultural Education, and Teaching English to Speakers of Other Languages
- M.A. Reading Education (Elementary, Secondary, Special)
- M.A. Special Education
- Ed.S. Curriculum and Instruction; Emphasis Areas: Subject Matter Specialty, Early Childhood, Elementary or Middle School, and Curriculm Theory and Leadership
- Ed.S. Reading Education
- Ph.D. Interdisciplinary (Education and other disciplines) (see School of Graduate Studies http://www.umkc.edu/sgs)

Faculty Scholastic Activity and Research Interests

Faculty in Curriculum and Instruction have a wide variety of experiences and interests. Several faculty members conduct research on achievement and pedogogy for at-risk students, direct grant programs, and work intensely and collaboratively in school settings. Faculty emphasize the importance of technology in the classroom and incorporate this content into their work. They are active in national and regional professional associations, in which many hold offices. Faculty in Curriculum and Instruction strive to facilitate high levels of professional development and leadership skills and help their students achieve their educational goals.

Division of Urban Leadership and Policy Studies in Education

Chair:

Dianne Smith, Ph.D. (816) 235-**2458**

Areas of Study and Degrees

- M.A. Educational Administration; Emphasis Areas: Administration (Elementary or Secondary), Higher Educational Administration, and University Learning, Teaching, and Academic Support Services.
- Ed.S. Educational Administration; Emphasis Areas: Administration (Elementary or Secondary), Higher Educational Administration, Special Education Administration
- Ph.D. Interdisciplinary (Urban Leadership and Policy Studies in Education with other disciplines) (see School of Graduate Studies http://www.umkc.edu/sgs)

Faculty Scholastic Activity and Research Interests

Faculty in Urban Leadership and Policy Studies have a wide variety of experiences and interests. Faculty members engage in research and consult on education-related issues in both public and higher education. The faculty are committed to multiculturalism and the importance of diversity in education settings. They advise students in research and administrative endeavors, and help them achieve their professional career goals.

Graduate Programs

The following graduate programs are offered:

- Counseling and Guidance, M.A. and Ed.S.
- Counseling Psychology, Ph.D.
- Curriculum and Instruction, M.A. and Ed.S.
- Educational Administration, M.A., Ed.S. and Ed.D.
- Reading Education, M.A. and Ed.S.
- Special Education, M.A.
- Interdisciplinary Ph.D. (see School of Graduate Studies http://www.umkc.edu/sgs)

General Information on Master of Arts Degrees

Requirements for the Master of Arts

Requirements for a master's degree include a minimum of 30 credit hours but vary according to the major and emphasis area. Regardless of program length, at least 60 percent of the coursework on the degree program must be numbered 500 or above. A GPA of at least 3.0 must be maintained, with no grade lower than a C earned in any 500-level course. A maximum of 20 percent of coursework numbered 500 or above on the master's program may have grades of C. Any courses on the 300 and 400 level to be included in a master of arts program must be taken for graduate credit and only by arrangement with the adviser. No grade lower than B- may earned in any 300- or 400-level course to be used toward a graduate degree.

As soon as possible after regular admission to graduate study, the student should meet with a faculty adviser to develop a program of study. This program must be filed with the Education Student Services Office prior to completion of the last 15 hours of coursework. Program revisions may be requested later but also must be approved by the student's adviser and the dean's representative.

Twenty percent of resident graduate coursework may be transferred from other accredited universities' graduate programs. A maximum of 49 percent of acceptable graduate work (no grade below B) may be transferred from other campuses of the University of Missouri. Credits are transferred only with the recommendation of the adviser and the consent of the dean's representative in the School of Education. Transfer credit must not be more than seven years old at the time of program completion.

Transfer credit may be allowed for correspondence courses, provided the credits meet the above criteria. A maximum of six semester hours of continuing education courses that have been taken for graduate credit (workshops, special topics) may be included on a master's program. Students must provide a letter from the transfer institution clarifying the grade equivalent for transfer work posted as "credit" or "pass."

For regular courses taken through continuing education at UMKC to apply on degree programs, the student must be admitted to graduate study and have an approved program on file, including the continuing education courses.

The amount of workshop credit, either 498 or 470 series courses, that can apply toward a master's degree can not exceed more than 9 credit hours or more than 25 percent of the total degree program.

Credit more than seven years old at the time of degree completion must be validated. To validate a course, the student must meet with the instructor of the current equivalent course to devise a plan in which the student's current knowledge of the coursework can be assessed. Faculty may ask the student to write a paper, review current literature, or take examinations to determine whether the student's knowledge of the subject is acceptable. A maximum of 30 percent of the student's program of study may be validated under this procedure. All validation must be completed prior to the completion of the final semester of enrollment for the degree.

A thesis is not required for the master of arts degree, although the option for a thesis is available. A final integrating experience or independent or group research study may be required of those not selecting the thesis option.

Requirements for Retention

Students must:

- 1. Meet all admission requirements;
- 2. File a planned program of study in consultation with a faculty adviser and have it approved by the dean's representative in the Education Student Services Office;
- Complete all coursework listed on the approved program of study;
- 4. Maintain an acceptable graduate GPA with no grades below B- (3.0) in 300- or 400-level courses, no grades below C (2.0) in any 500-level course, at least 80 percent of the degree program completed with grades of A or B, and a 3.0 average maintained in all graduate coursework, regardless of whether the courses are on the actual degree program;
- 5. Apply for the degree (graduation) by the posted deadline during the final term of enrollment;
- 6. Enroll in at least 1 credit hour during the term they intend to graduate.

Master of Arts: Counseling and Guidance

The master of arts program in counseling and guidance prepares professional counselors. Students in this program generally will be eligible for licensure as a professional counselor in the states of Missouri and Kansas. Students in this program take a common core of 39 credit hours, and then specialization courses in one of four emphasis areas: Elementary and Secondary School Counseling, Mental Health Counseling, Couples and Family Counseling, and Substance Abuse Counseling. The coursework includes a minimum of 2 semesters of supervised practicum experiences, and 2 semesters of a 20-hour-per-week supervised internship experience.

Students who elect the school counseling emphasis will, upon successful completion of the coursework and passing of the Praxis Exam for counseling, be eligible for counselor certification in Missouri. Most school-counseling students find employment in K-12 educational settings. Other graduates of our programs are employed in a variety of settings including community-based mental health centers, hospitals, community colleges, four-year colleges, specialized areas in large universities (e.g., career planning and placement, drug and alcohol counseling), the court system and private practice. Many students go on to obtain educational specialist and Ph.D. degrees.

Admissions:

We currently offer all four specialization options at the Volker campus, and the School Counseling emphasis only at the Northland campus (see below). Students who are admitted to the Volker campus in the area of School Counseling may be required to take some of their school specialization courses at the Northland campus. Applications for the Volker campus are accepted for the Fall and Winter semesters. Applications for the Winter semester must be postmarked by October 1st. Applications for the Northland campus are accepted for Summer and must be post-marked by April 1st. Application materials must be submitted to two separate offices on campus: 1) The UMKC Admissions Office, AND 2) The Counseling and Guidance Admissions Committee. Applicants will be notified of their acceptance or rejection from the program in time to begin summer semester (June and July) courses. Although most of our courses are only open to students who have been admitted to the program, there are some classes that may be taken prior to admission. Students should note, however, that success in those classes does not guarantee admission to the program; students will be required to meet the admission criteria specified below.

Admission Criteria:

- Overall undergraduate GPA of 2.75 or better, or 3.0 or better (4.0 scale) in the last 60 semester hours
- Graduate Record Exam (GRE) score of 900 (Verbal + Quantitative) or a GRE Verbal score of 450 or better, and a minimum Analytic writing score of 4.0.
- Three evaluations (use evaluation forms in the application packet)
- Statement defining personal and professional goals
- MA Counseling and Guidance Application

Applying to the Program Students who wish to apply to the program will have to submit two separate applications.

- 1. UMKC Admission Application: Send the following:
 - Application for Admissions (available online at www.umkc.edu/admissions)(If applying for the Northland, please include: "Attention: Northland")
 - \$35 (domestic) or \$50 (international) non-refundable application fee
 - Official transcripts from all colleges/universities previously attended (in sealed envelope or sent directly from universities)
 - Graduate Record Exam (GRE) (official copy)

to:

Mailing Address

University of Missouri-Kansas City Office of Admissions 120 Administrative Center 5100 Rockhill Road Kansas City, MO 64110-2499

- 2. M.A. Counseling and Guidance Application: Send the following:
 - M.A. Counseling and Guidance Application (Volker or Northland form)*
 - www.umkc.edu/education/divisions.html
 - Graduate Record Exam (Official or Issued to Student)
 - Three reference forms*
 - Statement defining personal and professional goals

*Also available for Volker by calling (816) 235-**2722** and for Northland by calling (816) 235-**6631**.

(a) For application to Volker, send to:

Mailing Address

University of Missouri-Kansas City Division of Counseling, Educational Psychology and Exercise Science Room 215 Education 5100 Rockhill Road Kansas City, MO 64110-2499

(b) For application to Northland (School Counseling only), send to:

Mailing Address

UMKC Northland 400 NW Barry Road Kansas City, MO 64155

For more specific information about the master's in counseling and guidance see

http://www.umkc.edu/education/divisions.html

Degree Requirements

* Note: Only courses with an asterisk may be taken prior to being admitted to the program.

being admitted to the program.	
Required Core Courses (39 credit hours)	Hours
*CPCE 500 Intro. to Prof. Counseling	-
CPCE 505 Career Development I	3 3 3
*EDRP 508 Prin. & Methods of Research	3
CPCE 515 Assessment Methods in	5
Professional Counseling	3
CPCE 520 Theories of Counseling	3
CPCE 530 Methods of Counseling	2
CPCE 550 Methods of Counselling	2
CPCE 531 Counseling Practicum I	3 3 3 3 3
CPCE 532 Counseling Practicum II	3
CPCE 540 Theories and Methods of	4
Group Counseling	4
CPCE 551 Counseling In a Pluralistic	2
Society	3
CPCE 553 Ethics & Prof. Issues in	
Counseling	3
CPCE 575 Internship A	3 3 3
CPCE 575 Internship B	3
Couples and Family	
Couples and Family	Hound
Emphasis Area (21 credit hours)	Hours
CPCE 527 Theory/Methods of Sex Counseling	3 3
CPCE 541 Couples & Family Therapy	3
CPCE 542 Theory & Techniques of Family	2
Systems Therapy	3
CPCE 533 Couples & Family Practicum	3
CPCE 590CF Seminar in Couples &	
Family Therapy	3 3 3
*EDRP 513 Lifespan Human Development	3
Approved Elective (1)	3
Mental Health	
	Hours
Emphasis Area (21 credit hours)	
CPCE 527 Theory/Methods of Sex Counseling	3
CPCE 503 Psychopathology: Classification	2
& Treatment	3
CPCE 590MH Seminar in Mental Health	2
Counseling	3
*CPCE 501 Survey of Alcoholism	
& Substance Abuse	3
-OR-	
CPCE 521 Special Counseling Methods	
- Substance Abuse	3
*EDRP 513 Lifespan Human Development	3 3 6
Approved Electives (2)	6

Substance Abuse	
Emphasis Area (21 credit hours)	Hours
CPCE 527 Theory/Methods of Sex Counseling	3
*CPCE 501 Survey of Alcoholism	
& Substance Abuse	3
CPCE 521 Special Counseling Methods	
- Substance Abuse	3 3
CPCE 590SA Seminar in Substance Abuse	3
CPCE 503 Psychopathology: Classification	
& Treatment	333
CPCE 541 Couples & Family Therapy	3
Approved Elective (1)	3
School Counseling (12/18 credit hours)	Hours
*EDSP 407(1) Education of the Exceptional	nours
Child and Youth	3
*CPCE 502 Foundations of Elementary	5
& Secondary Guidance	3
CPCE 550 Organization and Administration	5
of Counseling Programs	3
*EDRP 510 Child Behavior & Development	3
(Elementary and K-12 counselors only)	5
-OR-	
*EDRP 512 Adolescent Development	
& the school	3
(Secondary and K-12 counselors only)	5
-OR-	
*EDRP 513 Life Span Human Development	3
(Elementary, Secondary, and K-12 counselors)	5
*EDCI 512(2) Strategies for Effective	
Classroom Management	3
*EDCI 517(2) Teaching Methods & Practices	3
(1) Many people with a teaching certificate already	
course. You do not need to retake it.	nave uns
(2) Required for those who do not hold a teaching c	ortificato
(2) Required for those who do not note a teaching of	crimeate

(2) Required for those who do not hold a teaching certificate (18 credit hours total).

Master of Arts: Educational Administration

General Nature of the Program

S-hatamaa Ahaaa

The master of arts degree in educational administration, accredited by the National Council for Certification of Teacher Education, is designed to provide entry-level preparation for students planning careers in school administration.

The course of study includes a sequence of basic and advanced studies and other applied learning experiences. Students have the opportunity to develop understanding and skills through seminar courses, individual study, and the practice of inquiry in addition to study in required courses. The program is designed to support a focus on professional effectiveness and to foster research, evaluation and assessment activities for students. Instruction and mentored practical experiences will make frequent use of and reference to evaluation and assessment of student performance.

Emphasis Area: School (Grades K-12) Administration The master's program with emphasis in school administration is designed to prepare leaders for 21st century schools. These leaders must begin now to envision the nature of a global technical-information-based society and the schooling such a society will require. Assumptions based on available knowledge concerning these schools will be made in designing the M.A. program for students. Students will be expected to develop "Learning Organizational Culture" schools and demonstrate competency to develop:

- 1. Into a facilitator of relationships and outcomes that enhance the effective operation of the school;
- 2. Collaborative and participative planning and decision-making structures (teams);
- 3. Support networks from the community and in the school;

- 4. School organizations as cultures of renewal, risk, problem-solving, trust and caring;
- 5. School culture of reflective and critical thought concerning learning theory and practice.

On completion of the program, students will be equipped to envision and embrace an information-based, developmental society. Students begin their program of study with a cohort group of other potential school leaders and will take a series of 6-credit-hour block courses. Each cohort will work collaboratively throughout its studies and be led by University faculty and school leaders from throughout the greater Kansas City region.

Students will develop professional portfolios, including both individual and group projects, over the course of their degree program. While the three-block sequence is intended for school leaders at every level, it is expected that students will tailor their elective coursework and their culminating experience (practicum or internship) to the building level at which they hold their teaching credentials.

Students who complete the master of arts in educational administration may be recommended for initial certification as a building administrator (Kansas) or principal (Missouri). Students must complete the Educational Specialist to earn advanced principal certification in Missouri. Advanced certification is required to be a principal in an AAA-rated school district. Administrative assessment (the School Leaders Licensure Assessment) is required in Missouri.

Admissions and Retention

Admission and retention for the M.A. in educational administration, with an emphasis in school (K-12) administration, requires that the following steps be successfully completed:

Conditional Admission into Program

- Undergraduate GPA of 2.75 or higher (1)
- Two years teaching experience or permission of division chair
- Essay statement regarding past, present and future career goals (500 words or fewer)
- At least three letters of recommendation

Admission into Program

- Successful completion of Block I (EDUL 501(2)) with minimum of a B grade (3)
- Recommendation of the faculty and acceptance into program by the division

Acceptance into Practicum

- Successful completion of all coursework (4) with a B grade or better
- Recommendation of the faculty based on content portfolio examination relative to competencies completed that are consistent with Educational Leadership Constituent Council (ELCC), School of Education and ULAPSE Division standards and dispositions

Program Completion and Recommendation for Administrative Certificate

- Successful completion of the practicum, which includes the employment portfolio
- Recommendation of the faculty based on coursework completion, development of an administrative platform and exit presentation
- Completion of the student exit survey

Post-Program Completion

- Student completion of ULAPSE graduate survey relative to preparation program and ELCC standards
- Employer survey completion (supervisor)
- Virtual coaching
- Focus groups comprised of first-, second- and third-year administrators

(1) No more than 6 post-undergraduate/graduate credit hours may transfer into the M.A. program.

(2) Students must file a **Program Plan of Study** while enrolled in the Block Course EDUL 501.

(3) The Block I Portfolio requirement aims to move students toward intellectual competence and understanding of School of Education and division academic standards (i.e., Educational Leadership Constituent Consortium (ELCC) national standards and MoSTEP state standards).

(4) EDUL 501 is the prerequisite to EDUL 502; and EDUL 502 is the prerequisite to EDUL 503. These courses are mandatory and *cannot* be waived. Students must enroll in these courses in sequence.

Degree Requirements

Theoretical and Functional Aspects of Educational Administration (27 hours)

Required core for all level principals:	Hours
EDUL 501* Foundations of School Leadership	
and Organization (Block I)	6
EDUL 502* Building Administration	
& Management (Block II)	6
EDUL 503* Student, Staff & Organization	
Development (Block III)	6
EDUL 507 School Supervision	3
EDUL 515 Governmental & Legal Aspects	-
of Education	3
EdUL 574 Administrative Practicum	3
* EDUL 501, 502 and 503 must be taken sequentiall	y.

EDUL 501 is offered in the Fall and Spring Semesters only.

Related and Supporting Areas: Curriculum, Humanistic, Behavioral, Research (12 hours)

Denavioral, Research (12 nours)	
Curriculum (Required 3 hours) Select one course:	Hours
EDCI 505 Introduction to Curriculum Theory EDCI 506 Curriculum Design EDCI 591 Curriculum & Instruction	3 3
for the 21st Century	3
Humanistic (Required 3 hours) Select one course:	
EDUL 524 Phil. Inquiry and Education	3
EDUL 526 Phil. Foundations of Education	3 3 3
EDUL 527 Hist. Foundations of Education	3
Behavioral (Required 3 hours) Select one course:	
EDRP 502 Advanced Educational Psychology	3
EDRP 510 Child Behavior and Development	3
EDUL 525 Cultural Foundations of Education EDUL 528 Sociological Found. of Education	3 3 3 3
EDRP 512* Adolescent Devel, and the School	5
(Meets Middle School cert. requirements) EDRP 604 Cognitive Processes in Learning	3
& Instruction	3
Research (Required 3 hours)	
Select one course: EDRP 505 Statistical Methods	3
EDRP 508 Principles and Methods of Research	5
(Required for Kansas Certification)	33
EDRP 522 Principles of Testing	3

Principal Certification

Students seeking administrative certification must first offer proof of holding valid teaching certification at the same level (i.e., elementary or secondary, and have a minimum of two years teaching experience). The M.A. is offered with certification concentrations in elementary school administration or secondary school administration. Additional coursework is required for certification as a middle school administrator.

Those who complete the master of arts in educational administration may be recommended for initial certification as a building administrator (Kansas) or principal (Missouri). Students must complete the educational specialist degree to earn advanced principal certification in Missouri. Advanced certification is required to be a principal in a triple-A rated school district in Missouri. In addition to completion of the academic program, Missouri requires all prospective administrators to successfully complete the School Leaders Licensure Assessment.

Emphasis Area: Higher Education

The Graduate Programs in Higher Education prepare administrators and educators for the demands of educational leadership in colleges or universities, not-for-profit organizations, the allied health professions, policy organizations, and other post-secondary educational programs. Through a comprehensive masters program for individuals wanting a graduate degree or through coursework taken for professional development, the program supports administrative leaders and educators who seek to enhance their professional competencies and effectiveness in todays increasing diverse work world.

The masters program has two specialty tracks: Higher Education Administration and University Learning, Teaching, and Academic Support Services. These specialty tracks parallel the programs dual commitments to those preparing for administrative practice and to those interested in strengthening their skills in the design of innovative adult learning, academic support services, or college teaching.

Student programs of study at the masters level are developed to reflect required core courses that provide all masters level students with fundamental understandings of higher education, student development, evaluation and assessment, organizational leadership, and diversity. In addition, the program offers a range of cognate courses that are tailored to meet specific student interests or learning goals in administrative leadership, student affairs administration, college teaching, professional education, or academic support services. Advising materials and meetings with faculty enable students to create academic programs that meet their unique learning needs. Unless indicated, all courses are available to non-degree seeking students for professional development.

All masters level students will design a full-term, administrative or instructional practicum in collaboration with a mentor-adviser and the instructor in the fieldwork course. The purpose of the practicum is to provide students with guided opportunities to enhance skills, expand their professional experience base, and apply course learnings in new settings.

Admissions and Retention

Please contact the division of Urban Leadership and Policy Studies in Education for specific information on admission and retention requirements for the M.A. with an emphasis in Higher Education. The Higher Education faculty review all admissions applications and make admission decisions. Application deadlines are as follows: July 1 for Fall term; November 1 for Winter term; and April 1 for Summer term.

Degree Requirements

1. Candidates for the masters degree must complete a minimum of 39 credit hours of coursework beyond the bachelor's degree. All students must file an approved plan of study after taking two graduate-level, higher education program courses and obtaining a grade of B or higher in both.

2. Required core courses, as well as approved cognate courses, are specified for each specialty track. Students must have prior faculty approval in order to substitute any course not listed on their plan of study or not designated as a higher education core or cognate course.

3. Student grades in core or cognate courses must average B (3.0) or better with no grade below C allowed to count for graduate credit in the degree program.

4. All practicum fieldwork and fieldwork sites must be pre-approved before beginning the fieldwork experience. Attendance in the fieldwork course during the practicum is required.

Please contact the division of Urban Leadership and Policy Studies in Education for specific information on core course requirements and approved cognate courses for the M.A. with a specialty in higher education administration.

Master of Arts: Curriculum and Instruction

The master of arts in curriculum and instruction is a degree sought by teachers and others who wish to enhance their knowledge base for application in the classroom and to increase K-12 student learning. There are six emphasis areas from which to choose:

- Subject Matter
- Elementary
- Early Childhood
- General
- Multicultural Education
- Teaching English to Speakers of Other Languages

Requirements for Admission

Students admitted to School of Education graduate programs are governed by School of Education requirements and those of the School of Graduate Studies. Students seeking advanced degrees also should consult the School of Graduate Studies section for regulations applicable to all graduate students.

Students with a baccalaureate degree and teacher's certification from a school of education may apply for all graduate programs or may enter with a baccalaureate degree (including a departmental major in a liberal arts program). Work toward a master of arts degree (except the M.A. in counseling and guidance) can begin during any semester.

Criteria for admission include an appropriate GPA and an overall record of achievement. A baccalaureate degree with a GPA of 2.75 or above (on a 4.0 scale), or a master's degree or other post-baccalaureate degree from an institution accredited by the regional accrediting agency is required for regular admission to the School of Education at the graduate level. Applicants who do not possess a post-baccalaureate degree and whose undergraduate GPA is between 2.0 and 2.75 are eligible for conditional admission and are required to complete the requirements described below. (Some variances from the above criteria apply to the counseling and guidance degree. Please refer to that section of the catalog.)

Conditional applicants must meet with a faculty adviser and are required to take four courses prescribed by the division for the degree in which the student intends to pursue. Applicants must achieve a grade of B or better in each of the four courses (a course may be repeated only once). Two of these courses must be at the 500 level, and three must be taken in different areas of the School of Education (one of the three, however, may be taken in another academic area of the University).

Students who successfully complete the conditional period are eligible for regular admission to the School of Education at the master's level. Only when conditional students are reclassified as degree-seeking may they file a program of study.

Students who do not successfully complete the conditional period will be permanently reclassified to post-bachelor status and will be allowed enrollment for undergraduate credit only. Post-bachelor students may not enroll in classes numbered 500 or above.

Degree Requirements

There is a 12 credit hour core to all programs. This core includes coursework in the humanistic, behavioral, curriculum and research foundation areas. In addition to these core courses, students complete between 18 and 24 additional hours in their emphasis area.

Core Courses

Core Courses	
Humanistic Studies (one course required) EDUL 526 Philosophical Foundations	Hours
of Education EDUL 527 Historical Foundations	3
of Education	3
Behavioral Studies (one course required) EDRP 502 Advanced Educational Psychology	3
EDRP 510 Child Behavior and Development EDRP 512 Adolescent Development & the School	3 3 3 3
EDUL 525 Cultural Foundations of Education	3
Research (one course required) EDRP 508 Principles and Methods of Research	3 3
EDRP 505 Statistical Methods I	3
Curriculum Required EDCI 505 Introduction to Curriculum Theory	3
EDCI 506 Curriculum Design EDCI 591 Curriculum & Instruction for the	3 3
21st Century	3
Emphasis Area: Subject Matter	
Total Hours Required	30
The following courses are required in addition to the courses listed.	core
Curriculum in the Designated Subject	
Matter Area (one course required) EDCI 520 English Curriculum in the Middle	Hours
and High School	3
EDCI 566 Specialized Secondary Curriculum in Social Studies	3
EDCI 553 Curriculum and Instruction in Science	3
EDCI 522 Language Arts in the	-
Elementary School EDCI 504 Social Studies Curriculum	3
Elementary Education EDCI 539 Mathematics Curriculum Development	3 3
Le ci ses munemanes cumentani Development	1
EDCI 570 Curriculum and Instruction in Technology	3 3

Subject Matter Concentration

Nine hours of coursework related to the student's teaching area are required. The courses would typically be taken in a department of the College of Arts and Sciences, the School of Biological Sciences or be subject-related courses in the School of Education.

Students pursuing physical education as subject matter will take the 9 concentration hours and 6 supporting hours in physical education in addition to the physical education curriculum course.

Supporting Courses

Six hours of approved electives from those courses offered by the Division of Curriculum and Instructional Leadership are required.

Emphasis Area: Elementary

Total Hours Required

30 The following courses are required in addition to the core courses listed.

This emphasis is for elementary teachers or those teachers who are interested in gaining perspective on elementary strategies. It does not lead to elementary certification.

Curriculum in Basic Content (four courses required) EDCI 553 Curriculum and	Hours
Instruction in Science	3
EDCI 522 Language Arts in the Elementary School -OR-	3
EDCI 523 Advanced Literature for Children	3
EDCI 504 Social Studies Curriculum Elementary Education EDCI 539 Mathematics Curriculum	3
Development	3
Instructional Methodology (one course required) EDCI 508 Curriculum and Methods for	Hours
Teaching the Non-Motivated Learner	3
EDCI 510 Differentiating Instruction Through Teaching/Learning Styles EDCI 511 Developing Multidisciplinary	3
Problem Solving Skills	3

Supporting Courses

Three credit hours of coursework offered by the Division of Curriculum and Instructional Leadership or approved subject matter from the College of Arts and Sciences, the Conservatory of Music or the School of Biological Sciences are required.

Emphasis Area: Early Childhood

Total Hours Required 36 The following courses are required in addition to the core courses listed.

The early childhood emphasis is for those who hold elementary or early childhood teacher certification, or for those who are interested in the field of early care. The master's degree alone does not lead to certification in early childhood. Additional courses are required to obtain certification to teach early childhood education.

Early Childhood Courses

Luriy Childhood Courses	
(Eighteen hours, including one practicum	
course, are required)	Hours
TE 440 Introduction to Early Childhood	
Education	3
TE 442 Observation, Assessment	
and Screening	3
TE 450 Integrating Early	
Childhood Curriculum	4
TE 451 Child Guidance in the Classroom	3
TE 452 Family & Program Relations	4 3 4 2 3
TE 453 Learning from Parents	2
TE 454 Human Relations	3
EDCI 576 Administration of Early	
Childhood Education Programs	3
EDCI 578 Play and the Early Childhood	
Environment	3
EDCI 579 Theory and Issues in	
Early Childhood	3
EDCI 580 Curriculum for Early Childhood	3 3

EDCI 581 Infant/Toddler Programs: Theory,	
Research, and Practice (practicum)	3
EDCI 582 Program Models for	
Early Childhood Education	3
EDCI 583 Supervision in Early Childhood	
Education	3
Culminating Experience (one course required) An approved special project, internship or thesis is required to integrate academic work with the field. EDCI 575 Internship in Early	
Childhood Education	6

EDCI 584 Individual Studies in	
Early Childhood Education or Action Research	6
EDUČ 599 Research and Thesis	6

Emphasis Area: General

Total Hours Required

The general option is the most flexible and allows students to create a program to meet their desire to become an accomplished teacher. This degree may be pursued concurrently with teacher certification. Additional coursework is required for certification. In addition to the core courses, students take coursework related to their educational role and supporting coursework in curriculum and instruction.

Courses Related to the Student's Educational Role Twelve credit hours of approved coursework may be taken in any college or school of the University. They should form a coherent body of work related to the student's educational goals.

Supporting Courses

Six credit hours of coursework offered by the Division of Curriculum and Instructional Leadership are required.

Emphasis Area: Multicultural Education

Total Hours Required

33

30

This emphasis is for teachers or practitioners who are interested in developing competency for multicultural teaching. Students will have the option of selecting a focus area in Cultural Diversity, Urban Teaching, and Working with Limited English Proficient Learners. The program does not lead to teacher certification.

The following courses in each of the focus areas are required in addition to the core courses listed:

Focus A: Cultural Diversity (Select 12 hours)	Hours
EDCI 508 Motivating Students through	
Culturally Responsive Pedagogy	3
EDCI 562 Teaching for Equity and	
Social Justice	3
EDCI 563 Multicultural Perspectives in	_
Education	3
EDUL 522 School Organizational Culture as	_
the Context for Change	3
EDCI 560 Teaching and Learning in	2
Urban Schools	3
EDCI 548 English as a Second Language	2
in Content Areas	3
	3 Hours
Focus B: Urban Teaching (Select 12 hours)	5
	5
Focus B: Urban Teaching (Select 12 hours) EDCI 560 Teaching and Learning in	Hours
Focus B: Urban Teaching (Select 12 hours) EDCI 560 Teaching and Learning in Urban Schools EDCI 547 Foundations of English as a Second Language	Hours
Focus B: Urban Teaching (Select 12 hours) EDCI 560 Teaching and Learning in Urban Schools EDCI 547 Foundations of English as a Second Language	Hours 3
Focus B: Urban Teaching (Select 12 hours) EDCI 560 Teaching and Learning in Urban Schools EDCI 547 Foundations of English as	Hours 3
Focus B: Urban Teaching (Select 12 hours) EDCI 560 Teaching and Learning in Urban Schools EDCI 547 Foundations of English as a Second Language EDCI 561 Teaching Diverse Populations	Hours 3 3
Focus B: Urban Teaching (Select 12 hours) EDCI 560 Teaching and Learning in Urban Schools EDCI 547 Foundations of English as a Second Language EDCI 561 Teaching Diverse Populations in Today's Classrooms	Hours 3 3
Focus B: Urban Teaching (Select 12 hours) EDCI 560 Teaching and Learning in Urban Schools EDCI 547 Foundations of English as a Second Language EDCI 561 Teaching Diverse Populations in Today's Classrooms EDCI 563 Multicultural Perspectives in Education EDUL 522 School Organizational Culture as	Hours 3 3 3
Focus B: Urban Teaching (Select 12 hours) EDCI 560 Teaching and Learning in Urban Schools EDCI 547 Foundations of English as a Second Language EDCI 561 Teaching Diverse Populations in Today's Classrooms EDCI 563 Multicultural Perspectives in Education	Hours 3 3 3

EDCI 548 English as a Second Language in Content Areas	3
Focus C: Teaching Limited English Proficient Learners (Not intended to lead to	
ESL Endorsement - Select 12 hours)	Hours
EDCI 508 Motivating Students through	
Culturally Responsive Pedagogy	3
EDCI 545 Language Learning in a	
Multilingual Society	3
EDCI 547 Foundations of English as	
a Second Language	3
EDCI 548 English as a Second Language	
in Content Areas	3
EDCI 560 Teaching and Learning in	
Urban Schools	3
EDCI 563 Multicultural Perspectives in	
Education	3
Guided Practicum	3

Supporting Courses

Six credit hours of approved electives from those courses offered by the Division of Curriculum and Instructional Leadership are required.

Emphasis Area: Teaching English to Speakers of Other Languages

Total Hours Required

36

This program leads to an endorsement to teach English to speakers of other languages in schools for those who already possess a teaching certificate for elementary or secondary education. Others may take the degree program for personal enrichment and for use outside of public education.

The following courses are required in addition to the core courses listed:

Teaching English as a Second Language	Hours
EDCI 545 Language Learning in a Multilingual Society	
Multilingual Society	3
-OR-	
ENGL 470 Introduction to Descriptive	
Linguistics	3
EDCI 546 Literacy Development/Biliteracy	3
EDCI 547 Foundations of English as Second	
Language: Instruction and Theory	3
EDCI 548 English as a Second Language in	
Content Areas	3
EDCI 549 Practicum in English as a Second	
Language	3
FL 494 Methods of Teaching a Foreign Language	3
	-

An elective course related to teaching English to speakers of other languages. Courses must be approved by a faculty adviser.

Master of Arts: Reading Education

The Division of Curriculum and Instructional Leadership offers a program of study leading to the degree of master of arts in reading education. A teacher certification program is also available to those who hold a prior teaching certificate for public schools and have a minimum of two years teaching experience.

Objectives for the master of arts vary according to candidates' career objectives. In general, candidates should expect:

1. To develop competencies in:

- Reading instruction for elementary and/or secondary, college and adult students;
- Individual diagnosis and treatment of sub-optimal to severely disabled readers;
- Knowledge of the strategies and techniques used in reading research, and experience in reading and reporting such research.

- 2. To meet requirements for certification as a Special Reading Teacher grades K-12. (Initial teaching certification at the elementary, middle or secondary level required.)
- 3. To meet all professional standards specified by the Professional Standards and Ethics Committee of the International Reading Association.

The 33-credit-hour program of study consists of the reading requirements, humanistic and behavioral studies requirements, and electives.

Reading Requirements for the Major Area

A minimum of 21 credit hours of reading coursework is required and must include:

- ED 434 Classroom Diagnosis and Correction of Reading Problems
- ED 439 Content Area Reading and Language in the Intermediate through Junior High Levels
- ED 534 Reading Assessment and Evaluation
- ED 542 Introduction to Diagnostic and Treatment Procedures in Reading
- ED 575R Internship in Reading
- ED 590R Seminar in Reading

Humanistic Studies

The minimum of 3 hours must include one of the following courses:

- EDUL 526 Philosophical Foundations of Education
- EDUL 527 Historical Foundations of Education

Behavioral Studies

The minimum of 3 hours must include one of the following courses:

- EDRP 512 Adolescent Development
- EDRP 502 Advanced Educational Psychology
- EDRP 510 Child Behavior and Development

Final Examination

Students must pass a written examination covering their reading coursework.

Electives

Six credit hours of coursework related to the major area of reading education are needed to satisfy this requirement. This coursework must be approved by the student's faculty adviser.

Students whose undergraduate training was not in elementary education will complete at least a 36-hour program to compensate for previous lack of training and orientation to the field.

Master of Arts: Special Education

The master of arts in special education is a degree sought by teachers and others who wish to enhance their knowledge and skills in working with children and adolescents with exceptional learning needs. The Division of Curriculum and Instructional Leadership offers a program of study leading to the degree of master of arts in special education. The focus of the master's degree is in mild/moderate cross-categorical (MM/CC) disabilities. The program prepares educators to teach students, to serve as advocates for children and their families, and to work collaboratively with colleagues in K-12 educational settings, including public and charter schools, private schools, residential centers, and hospital programs.

Admission Requirements

Candidates entering the master's program with emphasis in MM/CC disabilities must hold a baccalaureate degree and have an overall GPA of 2.75 or higher on a 4.0 scale. Official admission to the University of Missouri-Kansas City graduate

school is required. Candidates who do not hold initial teaching certification in elementary or secondary education must pass the College Basic Academic Subjects Examination (CBASE), with a score of 235 or greater, to enter the program. Informational packets for the CBASE can be obtained from Student Services in the School of Education.

Program Requirements

Program requirements vary depending on the combination of degree and certification desired. For example, a certified teacher seeking to obtain a master's degree in mild/moderate disabilities would typically have a 36-40 hour program. A certified teacher seeking to obtain a master's degree in mild/moderate disabilities plus an additional state endorsement in MM/CC would typically have a 40-45 hour program.

Candidates without initial certification will work simultaneously with the state of Missouri for initial endorsement while applying appropriately completed coursework to their master's degree program. This type of program would typically include 29 hours of competency-based certification coursework combined with 12-18 hours of university requirements to complete the master's degree.

For specific degree requirements, contact the Division of Curriculum and Instructional Leadership at 816-235-2241 or e-mail education@umkc.edu.

Certification

Courses required for certification in Missouri and Kansas are available and are typically completed as part of the MM/CC program for candidates who hold initial teaching certification. Arrangements can be made for obtaining initial certification in MM/CC; however, employment in the field and additional coursework will be required. Because the requirements for certification vary from state to state, it is important to plan a course of study carefully with a special education faculty adviser during the first semester of coursework at UMKC.

General Information on Education Specialist Degrees

The goal of the educational specialist degree is to develop personnel who are highly competent practitioners/specialists in specific fields of education. The program of study will place emphasis on the extension of the students' abilities to apply theory, methodology and techniques to practical problems related to the individual's field. The breadth of studies will be consistent with the guidelines suggested by the appropriate professional organization. Graduates are expected to be competent translators of practices and research.

The educational specialist degree can be earned in counseling and guidance, educational administration, reading education, or curriculum and instruction.

Requirements for Admission

Students are eligible for consideration for admission to the Ed.S. degree program in the School of Education when they have met at least one of the following requirements:

- Students must be eligible for regular admission to the School of Education at the graduate level (undergraduate GPA must be at least 2.75 on a 4.0 scale); if applicants have earned graduate credit, their graduate GPA must be at least 3.0.
- The completion of a master's degree from an accredited institution of higher education and a cumulative graduate GPA of at least 3.0.

Applicants who have met one of the above requirements for admission to the School of Education at the Ed.S. level also must meet the divisional admission requirements for the specific degree program (educational administration, counseling and guidance, curriculum and instruction, or reading education). Please consult the section of the catalog outlining the requirements of the divisions.

All educational specialist degree-seeking students are governed both by School of Education requirements and those of the School of Graduate Studies.

Program Requirements

A minimum of 60 hours of approved graduate work beyond the bachelor's degree is required for the educational specialist degree, with at least 60 percent of the courses numbered 500 and above. Any courses on the 300 and 400 level included in the Ed.S. program of study must be accepted by the adviser and taken for graduate credit.

As soon as possible after admission to graduate study, students should seek to meet with a faculty member in the major to plan a program of study. This program must be filed in the Education Student Services Office and approved by the dean's representative when students still have at least 18 hours of coursework beyond the master's degree to complete. A majority of new coursework applied to any graduate degree to be completed at UMKC must be taken at UMKC. Transfer credit not included in a master's degree must not be more than seven years old *at the time of degree completion or graduation*.

Transfer credit may be allowed for correspondence courses, provided the credits meet the criteria for graduate coursework. A maximum of 6 credit hours of continuing education credit (workshops, special topics) taken for graduate credit may be included on an Ed.S. program.

The number of hours of workshop credit, either 498- or 470-series courses, that can be used on an Ed.S. degree program will be limited to 9 hours.

UMKC credit more than seven years old at the time of degree completion that has not been included on a master's degree is not applicable to an Ed.S. degree unless validated to the satisfaction of the School of Education and the School of Graduate Studies. A maximum of 30 percent of coursework on the student's program of study may be validated under this procedure. All validation must be completed by the end of the final semester of enrollment.

The coursework is divided into the following study areas:

Specialization (21-42 hours)

The specialization is defined as a body of coursework associated with the area of concentration or major. Such courses might deal with the theory, research and methodology of the field.

Supporting Area(s) (9-15 hours each)

In addition to specific courses in a field of study, there are those courses which expand the competence of the specialist. These supporting areas might include study in one or two related areas, or study might be an intensive development of specific skills within the field.

Culminating Experience (3-12 hours)

All students should be able to demonstrate an ability to perform satisfactorily in situations approximating the intended role or specialization. While such experience may be included in regular coursework, at least 3 hours of supervised practicum, internship or field experience should be accomplished where the practice is the focus of the course.

Humanistic and Behavioral Studies (6-12 hours)

The success of a specialist may also depend on a broader understanding and interpretation of the concepts related to the problems and practices of the field, as revealed by study in humanistic and behavioral sciences. Courses or seminars in educational history, philosophy, psychology or sociology, or other appropriate courses, might be included in this area.

Residency

Enrollment as a full-time graduate student during one semester (5 credit hours during summer sessions, 9 credit hours during fall and winter semesters) is required for the educational specialist degree.

Final Examination

Students are required to pass a final examination in the major field or an oral examination upon the completion of the practicum or internship for the educational specialist degree.

Requirements for Retention

Students should assume responsibility for the following steps:

- 1. Complete all admission requirements;
- 2. With the faculty adviser, establish a program of study and have it approved by the dean's representative;
- 3. Complete all courses listed on the program of study;
- 4. Maintain an acceptable GPA (Grades below B- in 300- or 400-level courses taken for graduate credit will not be accepted on the program of study. No grade lower than a C in any 500-level course is acceptable. A minimum of 80 percent of the program must be completed with grades of A or B. Additionally, students must maintain a 3.0 (B) average in all graduate coursework, regardless of whether the courses are on the actual program of study;
- 5. Apply for the degree (graduation) by the posted deadline during their final term of enrollment. Students are required to be enrolled in at least 1 credit hour during the term the degree requirements are to be completed.

Educational Specialist: Educational Administration

The educational specialist degree with emphasis in school administration (accredited by the National Council for Accreditation of Teacher Education and the Missouri Department of Elementary and Secondary Education) prepares teachers for specialization in school leadership and administration. The program also provides an opportunity for practicing administrators to enhance their professional skills and to connect with other practitioners from the metropolitan area and region. To this end, the program's emphasis is the development of broad understanding and experiences across the whole professional field, the acquisition of in-depth knowledge in at least one specialized field in educational administration, and integrative experiences demonstrating the application of theory to practice.

The program of study will be planned in accord with the candidates' professional goals. Emphasis areas include:

- General administration (school superintendents and other central office administrators);
- Secondary principals or assistant principals;
- Elementary principals or assistant principals;
- Special education administrators;
- Higher education administrative positions in community college, four-year college or university settings, in the allied health professions or education-related agencies.

Although not essential to completion of the educational specialist degree, the master of arts may be earned by the candidate at approximately the halfway point.

Requirements for Admission

Candidates must:

- 1. Possess a bachelor's or master's degree;
- 2. Have compatible teacher certification if seeking administrative certification (i.e., to be an elementary principal one must be an elementary teacher);

- 3. Have at least two years of professional education experience;
- 4. Meet unconditional admission requirements of the School of Graduate Studies, the School of Education and the Division of Urban Leadership and Policy Studies.

The Curriculum

A minimum of 36 credit hours is required in the major area. Individual programs will be designed with the assistance of the faculty adviser to develop competencies in the theoretical, technical and functional aspects of educational administration. The basic prerequisite course for the K-12 program is:

• EDUL 501, Foundations of School Leadership and Organization.

The basic prerequisite course for the higher educational administration program is:

• EDUL 550, Organization and Administration of Higher Education.

Completion of one of the following is required in all programs:

- EDUL 574 Administrative Practicum;
- EDUL 570 Administrative Practicum in Higher Educational Administration;
- EDUL 575 Internship in Administration; or
- EDUL 571 Internship in Higher Educational Administration.

Candidates are required to complete 18-27 credit hours of work in the supporting areas in education and humanistic and behavioral studies. Courses in the field of educational psychology, history of education, philosophy of education, sociology of education, curriculum, counseling, anthropology and approved courses from the Henry W. Bloch School of Business and Public Administration or from the behavioral sciences or humanities are considered appropriate. Also required are:

- EDRP 508, Principles and Methods of Research; and
- A second approved research course, such as statistics or a computer language.

Note: Students should identify a faculty adviser in urban leadership and policy studies in education at the time of admission to the School of Education. Final program planning is a joint responsibility of the candidate, the faculty adviser and the candidate's committee.

The committee, consisting of three members of the faculty, is established for each candidate early in the program of study. This committee and the candidate work cooperatively in reviewing progress in the program, planning the field project, and making arrangements for the oral examination. The committee makes recommendations to the dean of the School of Education regarding the candidate's program and the satisfactory completion of graduation requirements.

Requirements for Graduation

In addition to the general School of Education graduate degree requirements, the Ed.S. degree in educational administration also requires:

- 1. EDUL 574, Administrative Practicum, or EDUL 570, Administrative Practicum in Higher Education, or ED 575, Administrative Internship, or EDUL 571, Administrative Internship in Higher Educational Administration, a planned field experience and a written project;
- 2. A final oral examination upon completion of the administrative practicum or internship;
- 3. The educational specialist degrees designed to meet state certification requirements for school superintendency and special education administration have specific course requirements in addition to the above.

Educational Specialist: Counseling and Guidance

The educational specialist degree in counseling and guidance is offered and is recommended for the qualified counselor who desires a comprehensive, planned program of study designed to develop skills beyond the M.A. level. Emphasis areas include mental health counseling, couples and family counseling, school counseling with concentration in elementary or secondary, and substance abuse counseling. The educational specialist degree emphasizes direct application of theory to current problems.

Requirements for Admission

Applicants must:

- Satisfy all requirements for unconditional admission to the School of Graduate Studies;
- Hold a master's degree in counseling from an accredited institution;
- Have completed courses in theories and methods of counseling and in counseling practicum with grades no lower than B;
- Have a graduate grade-point average of at least 3.25 on a 4.0 scale;
- Graduate Record Exam (official or issued to student)

Admission Procedures

Individuals must make a formal application to the Division of Counseling and Educational Psychology for admission into the educational specialist program. Applications are accepted and reviewed on an ongoing basis.

Curriculum

Program of study must include the equivalent of the current M.A. degree in counseling and guidance at UMKC plus an additional emphasis-area minimum of 18 credit hours, to include CPCE 620, 640 and a post-M.A. practicum.

Students must maintain a B average in all coursework associated with the Ed.S. program.

No grade below B in professional counseling courses will be acceptable.

Students are required to confer with advisers prior to enrolling in any course leading to the educational specialist degree.

Courses at the 600 level cannot be taken until students are admitted to the Ed.S. program.

Requirements for Graduation

Students must complete all courses in the Ed.S. program with at least a 3.0 (B) final GPA.

Students must apply for graduation by the posted deadline during their final term of enrollment. All students must be enrolled during the term they intend to graduate.

Educational Specialist: Curriculum and Instruction

The goal of the educational specialist degree in curriculum and instruction is to develop personnel with the skills and understanding necessary to provide leadership in developing, implementing and evaluating instructional programs. Students may elect to prepare themselves for a particular curricular level, ranging from early childhood to post-secondary education, and for particular subject matter specializations, including language arts, mathematics, science and social studies. The program of study will emphasize extending the educators' abilities to apply theory, methodology and techniques to practical problems in their field. Emphasis areas include early childhood, elementary or middle school, subject matter specialty and curriculum theory and leadership.

The program is intended to provide classroom teachers and other practitioners with the professional background and expertise to function effectively as department chairs, curriculum coordinators/supervisors, grade-level coordinators, instructional team leaders, workshop leaders, in-service directors, etc.

Objectives of the program include:

- Understanding basic principles of curriculum development;
- Understanding basic principles and methods of curriculum evaluation;
- Extending knowledge in a subject matter specialization;
- Understanding curriculum strategies, historical and current, as applied to specialized subject matter areas;
- Applying curriculum skills and understanding to the resolution of instructional problems in a selected educational setting;
- Demonstrating skill in locating and interpreting research literature in fields of interest;
- Understanding the contribution of humanistic and behavioral studies to the field of education;
- Developing concepts and skills in a professional area which supports or extends the specialization in curriculum.

Requirements for Admission

- 1. Students are eligible for consideration for admission to the Ed.S. program in curriculum and instruction if they have met at least one of the following requirements:
 - They must be eligible for regular admission to the School of Education at the graduate level (undergraduate GPA of at least 2.75 on a 4.0 scale); if they have earned graduate credit, their graduate GPA must be at least 3.0.
 - The completion of a master's degree from an accredited institution of higher education and a cumulative GPA of at least 3.0 on a 4.0 scale.
- 2. Students must submit a letter of application for admission to the Division of Curriculum and Instructional Leadership.

The Curriculum

A minimum of 60 post-B.A. hours are required.

Curriculum Summary

Specialization	
(Curriculum and Instruction)	30-42
Supporting Area	9-15
Practicum	6-12
Humanistic and Behavioral Studies	6-12
Research Skills	3
Approved Electives (in above areas)	6
Total (minimum)	60
Curriculum Detail	

Specialization:

3
3
3

Select a specialty area in consultation with faculty adviser.

A. Elementary or Middle School Specialty (15 hours)

- 1. Select at least two of the following special curriculum courses:
 - EDCI 553 Curriculum & Instruction in Science
 - EDCI 522 Language Arts in Elementary School
 - EDCI 504 Social Studies Curriculum in Elementary Education
 - EDCI 539 Mathematics Curriculum Development

2. Select balance of specialty from courses offered by the Division of Curriculum and Instructional Leadership and academic units outside of the School of Education.

B. Early Childhood Specialty (15 hours)

- 1. Select at least two of the following special curriculum courses:
 - EDCI 578 Play in Early Childhood Education
 - EDCI 580 Curriculum for Early Childhood Education
 - EDCI 582 Program Models for Early Childhood Education
- 2. Select balance of specialty from courses in the early childhood education area offered by the Division of Curriculum and Instructional Leadership and academic units outside of the School of Education.

C. Subject Matter Specialty (15 hours)

- 1. Select at least one of the following special curriculum courses:
 - EDCI 520 English Curriculum in the Middle and High School
 - EDCI 551 Specialized Secondary School Curriculum: Natural Sciences
 - EDCI 566 Specialized Secondary School Curriculum: Social Studies
 - EDCI 553 Curriculum and Instruction in Science
 - EDCI 522 The Language Arts in Elementary School
 - EDCI 504 Social Studies Curriculum in Elementary Education
 - EDCI 539 Mathematics Curriculum Development
- 2. Select balance of specialty from academic courses outside School of Education; for example, courses in math, science, history, English, etc.

D. Curriculum Theory and Leadership (15 hours)

- 1. Both:
 - EDCI 618 Survey of Research in Curriculum
 - EDCI 620 Seminar in Theories Related to Curriculum
- 2. Select from the following:
 - EDCI 591 Curriculum & Instruction for the 21st Century
 - EDUL 501 Foundations of School Leadership and Organization Science
 - EDUL 519 Schooling and Change
 - EDUL 522 School Organization and Culture
 - EDCI 619 Curriculum Evaluation
 - EDUL 525 Cultural Foundations of Education
 - EDUL 526 Philosophical Foundations of Education
 - EDUL 527 Historical Foundations of Education

E. Multicultural Education (proposed)

Please call (816) 235-**2241** for more information on this program. Appropriate courses from arts and sciences pertaining to the student's role (as approved by the committee).

Supporting Area (9 hours)

A coherent selection of courses related to the students' career objective, in graduate areas outside curriculum and instruction (e.g., school administration, reading, counseling, research or special education).

Practicum (6 hours)

A novel field experience in an appropriate setting, including the preparation of a satisfactory paper relating to the practicum:

ED 621	Practicum in Curriculum and	
	Instruction	6

Humanistic and Behavioral Studies

One of: EDUL 524 EDUL 525 EDUL 526 EDUL 527	Philosophical Inquiry and Education Cultural Foundations of Education Philosophical Foundations of Education Historical Foundations of	
	Education	3
One of:		
EDRP 502	Advanced Educational Psychology	
EDRP 510	Child Behavior and Development	
EDRP 604	Cognitive Processes in Learning	
	and Instruction	
EDUL 525	Cultural Foundations of Education	
Research Skills		
One of:		
EDRP 608	Introduction to Graduate	
	Research	
EDRP 508	Principles and Methods of	
	Research	
EDRP 522	Principles of Testing (listed	
	above under specialization)	3

Approved Electives (6 hours)

These courses must be in one or more of the areas specified above.

Program Total (minimum)

Residency

One full-time summer session or one full-time semester is required.

Program Committee

Final program planning is the joint responsibility of the candidate, the adviser and the candidate's committee. The committee shall consist of three faculty members, all from curriculum and instruction or two members from curriculum and instruction and one from the appropriate subject matter area outside of the School of Education.

This committee and the candidate shall work cooperatively in reviewing progress in the program, planning the practicum experience, and making arrangements for the final examination in curriculum.

Final Examination

Students are required to pass a final examination in curriculum upon the completion of the practicum. This four-hour examination may be either written or oral, at the discretion of the committee.

Educational Specialist: Reading Education

Requirements for the educational specialist degree in reading education vary only slightly with the candidate's career objectives; more particularly, the degree is intended for those who wish to master the gamut of the field. The objectives of the Ed.S. in reading education are:

- 1. To ensure that the competencies in the discipline (reading education) have been attained.
- 2. To develop competencies in:
 - Organizing, supervising and evaluating reading programs;
 - Translating research findings into practices;
 - Diagnosing and working with severely disabled to dyslexic children;
 - Teaching reading at the secondary, junior college and college levels;
 - Conducting teacher training workshops at the in-service to master's level.

Requirements for Admission

Candidate must:

- 1. Meet the requirements for unconditional admission by the School of Graduate Studies;
- Possess a bachelor's degree and a teaching certificate;
 Have at least two years of teaching experience (or its
- equivalent);Apply to the program after the completion of a minimum of 6 credit hours of graduate level (500) accurace in
- of 6 credit hours of graduate-level (500) courses in reading education taken at UMKC. It is not necessary to have a master's degree to enter the program.

The Curriculum

60

Students must complete a minimum program of study consisting of 60 credit hours of graduate coursework divided into the following study areas: reading concentration, 21-24 hours; supporting area(s), 9-12 hours; practicum, 6-12 hours; and humanistic and behavioral studies, 6-12 hours.

Requirements for Graduation

Candidates must pass an examination in the major field developed and evaluated by three members of the reading education faculty.

General Information on Doctoral Degrees

The School of Education offers a Ph.D. degree program in Counseling Psychology that is accredited by the American Psychological Association since 1985. The School also participates, through the School of Graduate Studies, in the Interdisciplinary Ph.D. program. Two disciplines, education and urban leadership and policy studies in education are offered through the School of Education. Students may select one or both of those disciplines in addition to disciplines offered through other academic units across campus.

All but a select few Ph.D. programs at UMKC are interdisciplinary. Students desiring to study at the doctoral level in education and/or urban leadership and policy studies in education (which includes the foundation areas of educational theory and educational administration) must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific admission requirements may be found in the School of Graduate Studies section of the catalog.

Counseling Psychology, Ph.D.

The counseling psychology program emphasizes multicultural and individual diversity within a scientist-practitioner model. Consistent with the University's urban/metropolitan mission, this diverse faculty is committed to educating future counseling psychologists to improve the welfare of individuals and communities through scholarship and applied interventions.

The program faculty encourages students to develop primary identification with the core values of counseling psychology. These values emphasize:

- Assets, strengths and positive mental health;
- Respect for cultural and individual diversity;
- Scientific foundation for all activities;
- Developmental models of human growth;
- Relatively brief counseling interventions;
- Person-environment interaction;
- Education and prevention; and
- Career/vocational development.

The counseling psychology program's commitment to cultural and individual diversity is reflected in:

- Faculty composition;
- Student recruitment;
- Scholarship;

- Course content and offerings;
- Practicum opportunities; and
- Community service and consultation.

Education in counseling psychology follows a developmental model in which science-practice integration is emphasized throughout the program. Early and progressive training is provided in research, culminating in professionals who can design, conduct, and evaluate research relevant for counseling psychologists. Similarly, early and progressive training in practice activity is emphasized.

Program graduates will apply the values of counseling psychology to their work in a variety of employment settings, and as scientist-practitioners, their practice is informed by research and approached with a scientific attitude.

Counseling psychologists abide by the American Psychological Associate code of conduct. Students will understand the ethical, legal and professional issues related to the science and practice of counseling psychology.

More information about the program can be found at www.umkc.edu/education/divs/cpce.

Admission Criteria

The program is designed for bachelor's-level and master's-level applicants. A prerequisite background of core courses is required prior to acceptance into the program. These courses include undergraduate or graduate level: general psychology, theories of personality, tests and measurement, abnormal psychology, experimental psychology and introductory statistics. Students who have two or fewer deficiencies may be admitted. Such students must complete these deficiencies within one year of beginning study.

Recommended minimum for bachelor's level applicants:

- The completion of a bachelor's degree with a major in psychology;
- GRE combined verbal and quantitative scores of 1000;
- An overall undergraduate GPA of 3.0 covering all college work taken prior to the bachelor's degree;
- GRE writing score.

Recommended minimum for master's level applicants:

- The completion of a master's degree or equivalent in counseling or a closely related area;
- GRE combined verbal and quantitative scores of 1000;
- An overall undergraduate GPA of 3.0 or graduate GPA of 3.5 with an undergraduate GPA of 2.75;
- GRE writing score.

Individual applicants will be evaluated using the following dimensions: academic potential, interpersonal skills, contribution to programs, individual and cultural diversity, research skills or potential, and professional identity and involvement.

Alternative Criteria: students who do not meet the regular recommended criteria may be admitted under alternative criteria provided there is good reason to believe that the regular criteria do not adequately manifest the student's potential to do quality work in the program.

Admission Procedures:

- Using the above criteria, the applicant screening committee will select up to 30 applicants to be offered interviews. Personal interviews may be requested, but are not required. From those interviewed, up to 10 applicants will be offered admission. In addition, the committee selects a list of those who were interviewed to serve as alternates.
- Candidates will be notified of the admissions decisions by April 1.

- Candidates are required to act on the notification by April 15.
- If a first-round candidate does not accept, an alternate for the position will be selected from the list of the remaining candidates. Alternates will have 15 days to act on the notification.

Admission Requirements

Application packets for the Counseling Psychology Program must be requested from the Admissions Office by phone (816) 235-**1111**, or by mail at the Office of Admissions, 120 Administrative Center, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499.

All applicants must submit the following materials to the Admissions Office by January 15 prior to fall admission:

- An application for admission to graduate school, including transcripts of all past academic credits;
- Graduate Record Examination (GRE) verbal, writing, and quantitative scores;
- Application fee.

The following materials must be submitted directly to the Counseling Psychology Program (215 Education Building, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499).

- A Counseling Psychology program application cover sheet;
- Curriculum vitae including the following information:
 - 1. Educational background
 - 2. Relevant clinical and research experience
 - 3. Recent volunteer work
 - 4. Honors or awards
 - 5. Membership/leadership in professional organizations
 - 6. Presentations and publications;
- Three letters of recommendation, with evaluation forms as provided by UMKC (Evaluators should enclose their letters and rating forms in an envelope and sign across the seal of the envelope);
- Personal statement (2-3 pages) detailing professional goals, including research and applied interests;
- Photocopy of the UMKC application for admission.

Interdisciplinary Ph.D.

Please refer to the School of Graduate Studies (http://www.umkc.edu/sgs) for more information.

Centers and Projects

Kansas City Regional Professional Development Center The Kansas City Regional Professional Development Center (KCRPDC), instituted at UMKC's School of Education in July 1995, is composed of a support team of professional developers who work with schools and school districts in Clay, Jackson and Platte counties. Funded by the Department of Elementary and Secondary Education, the purpose of the center is to increase the performance of K-12 students in the region by building the capacity of Missouri's teaching and administrative staff through professional development. For more information call (816) 235-5627.

The following state-funded, school improvement programs are located within the KCRPDC:

Accelerated Schools

Accelerated Schools is a school improvement initiative based on Henry Levin's work. UMKC hosted the state's first Accelerated Schools Center, in which the staff works with approximately 80 schools. Accelerated Schools teaches a philosophy and a process for bringing about school improvement. For more information call (816) 235-**2442**.

Missouri Assessment Program (MAP)

The goal of the Missouri Assessment Program (MAP) is to raise achievement for all students. Regional facilitators train senior leaders nominated by district administrators. The senior leaders, in turn, share their work and experiences with MAP teams in their own buildings or districts. The professional development provides teachers a foundation for performance-based assessment. For more information call (816) 235-2497.

STARR Teachers

Select Teachers As Regional Resources (STARR) teachers are outstanding classroom teachers who are granted sabbaticals from their school districts to work with educators at the district, school and classroom levels. STARR teachers deliver and facilitate professional development to promote active, hands-on learning by students in all subject areas. Call (816) 235-**2483** for more information.

Economic Education Center

The Economic Education Center is one of a network of centers across the state and nation. The center is affiliated with the Missouri Council for Economic Education (MCEE), which in turn is a part of the National Council for Economic Education. The goal of the Center for Economic Education is to strengthen and support the teaching of economics in K-12 area schools. In keeping with this goal, the center provides graduate coursework, in-service programs and workshops to area teachers. The Economics Education Resource Collection, housed in the Instructional Materials Center in the School of Education, provides much-needed resource materials to area teachers.

Missouri Council of Teachers of Mathematics

The Missouri Council of Teachers of Mathematics is a 501(c)3 not-for-profit organization dedicated to supporting and improving mathematics teaching and learning at all levels. With a membership of more than 2,000, the organization has a long history of quality activities and programs. Affiliated with the National Council of Teachers of Mathematics, MCTM maintains strong contacts with the national agenda and with its own affiliated groups within the state. For more information visit MCTM at http://www.MoCTM.org.

Berkley Child and Family Development Center

The Berkley Child and Family Development Center provides quality care and education for young children and serves as a research training site for UMKC students. The center is administered through the School of Education and is part of the academic unit. It is accredited through the National Association for the Education of Young Children and licensed by the state of Missouri. Enrollment is open to the University population and the community for children ages 3 months to 6 years. During the summer, programming is also provided for children ages 6 to 11 years. Tuition assistance scholarships are available and are awarded based upon financial need. To inquire about enrollment or a tour of the facility call (816) 235-2600.

Missouri Center for Safe Schools

The purpose of this center is to provide a clearinghouse where urban, suburban and rural schools across Missouri can get information and ongoing assistance to help them develop promising and effective ways of dealing with the kinds of serious problems school violence represents. For additional information call (816) 235-**5657**.

Special Note on Courses

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The School of Education recently implemented a new series of curricular designations under which courses are listed:

- CPCE (Counseling Psychology and Counselor Education),
- EDCI (Education Curriculum and Instruction),
- EDUC (Education),
- EDRP (Educational Research and Psychology),
- EDSP (Education Special Education) and
- EDUL (Education and Urban Leadership).

Counseling Psychology and Counselor Education Courses

500 Introduction to Professional Counseling (3). Introduction to counseling and counseling psychology as professions practiced in a variety of settings. Basic concepts of mental health, client problems, history of the profession, ethics and standards, counseling in a multicultural and pluralistic society and credentialing. Includes use of professional journals and library investigation. May be taken prior to admission.

501 Survey of Alcoholism and Substance Abuse (3). Introduction to the problems, issues, and resources associated with alcoholism and drug abuse. Etiology and theories of treatment and prevention models are explored. Professional standards and credentialing are discussed. May be taken prior to admission.

502 Fndtns of Elementary & Secondary School Counseling & Guidance (3). The course will present an overview of theory and practice in the field of school counseling and will examine the roles and functions of guidance counselors. May be taken prior to admission.

503 Psychopathology: Classification and Treatment (3). This course is designed to provide students with an opportunity to study psychopathological patterns, mental disorders, and other reactions in client behavior, which are encountered by therapists, counselors, and psychologists in contemporary psychological service systems. The major focus of the course will be on learning current diagnostic criteria and making differential diagnoses. Attention will also be given to the etiology, development, dynamics, and treatment of psychopathology. In addition, the influence of culture on behavior and treatment will also be discussed.

505 Career Development I (3). Theories of career development and vocational choice and their implications in counseling. Emphasizes knowledge of occupational and career information sources and use of these data by counselors and counseling psychologists. Open to any student who has been admitted to an advanced degree program.

515 Assessment Methods in Professional Counseling (3). This course provides an understanding of assessment process and assessment techniques. Students will develop skills in selection, administration, and interpretation of representative assessment instruments. Prerequisites: Crosslisted: PSYCH 510

520 Theories of Counseling (3). Theoretical positions in counseling; significance of these theories in professional practice. To be taken prior to or concurrent with CPCE 530 (Methods of Counseling), both of which must be taken prior to Counseling Practicum I, CPCE 531. Co/Prerequisite: CPCE 500.

521 Special Counseling Methods - Substance Abuse (3). Theories and methods of counseling as applied to clients with substance abuse problems. Includes assessment, treatment strategies, and evaluation. Skills practice in implementing methods.

527 Theory and Methods of Sexual Counseling (3). The focus is on sexual development and the acquisition of therapeutic skills to work with problems relating to human sexual functioning and sexual dysfunctions. Co/Prerequisite: CPCE 520.

530 Methods of Counseling in Professional Psychology (3). This course is designed to introduce students to the fundamental concepts and methods of counseling in professional psychology. Students will apply ethical and multicultural principles to the helping relationship while learning the basic methods of humanistic, psychodymamic, and cognitive behavioral approaches as they relate to the helping process. A main focus of this course is the acquisition of basic helping skills. Students will also become familiar with counseling outcome research and will increase their level of counselor self-awareness. Prerequisite: PSYCH 622 or Co/pre-requisite: CPCE 500 with a B or better, and CPCE 520. Cross-listed Psych

531 Counseling Practicum I (3). Closely supervised therapeutic counseling with individuals; translation of theory into practice; clinical and professional techniques and issues. Preregistration by application at least 60 days prior to beginning of semester. Approval by the Counseling Psychology and Counselor Education Practicum Coordinator required. Co/Prerequisites: CPCE 553

532 Counseling Practicum II (3). Supervised therapeutic counseling with individuals and consultation in professional settings. Preregistration by application at least 60 days prior to beginning of semester. Approval by the Counseling Psychology and Counselor Education Practicum Coorindator required. Prerequisites: CPCE 531

533 Couples and Family Therapy Practicum (3-6). Supervised application of theories and methods of family therapy with individuals, couples and families. Preregistration by application at least 60 days prior to beginning of semester. Approval by the Division of Counseling Psychology and Counselor Education required. Prerequisite: CPCE 531, 541, 542.

539 Continuing Counseling Practicum (1-6). Supervised therapeutic counseling with individuals. Preregistration by application at least 60 days prior to beginning of semester. Approval by the Counseling Psychology and Counselor Education Practicum Coordator required. Prerequisites: CPCE 532.

540 Theories and Methods in Group Counseling (3). Theories and research in group counseling as related to the work of the counselor and counseling psychologist; establishing and maintaining a counseling group; qualifications of the group leader; goals for group counseling; therapeutic and anti-therapeutic forces in groups; special techniques. Three semester hours of lecture and one semester hour of laboratory experience. The two hours per week in laboratory experience is to practice group techniques. Prerequisite: CPCE 531.

541 Couples and Family Therapy (3). Introduction to and overview of couples and family therapy. Discussion of major theoretical positions, demonstrations of therapy strategies, role playing and case study examples.

542 Theories and Techniques of Family Systems Therapy (3). A study of major family systems theories and their applied practices in family therapy. Students will develop skills in family assessment techniques and family therapy processes.

550 Organization and Administration of Counseling Programs (3). Organization, administration, and planning of counseling programs with emphasis on their practical aspect; counseling practice in schools and agencies; intraprofessional relationships; legal and ethical considerations. Course to be taken near completion of the master's program.

551 Counseling in a Pluralistic Society (3). Addresses the needs of diverse populations served by counselors and addresses developing intervention methods of working with these populations. Focuses on advocacy and change agent roles of counselors. Prerequisite: CPCE 520.

552 Measurement Of Intelligence (3). A critical examination of instruments used to measure intellectual functions, this course will focus on the Stanford-Binet and Weschler Scales. The course includes training in the administration and scoring of intelligence tests and discussion of issues involved in the assessment and evaluation of intelligence. Limited enrollment. Lab fee. Prerequisites: Consent of program director (CPCE, or Special Education-Learning Disabilities, or Educational Research and Psychology).

553 Ethics And Professional Issues In Counseling (3). CPCE 553, Ethics and Professional Issues in Counseling, is designed to examine the major ethical and professional issues within the counseling profession. More specific, ethical dilemmas and professional issues revelant to the practice of mental health, marriage and family, school and substance abuse counseling are the major foci of this course. In addition, instruction is designed to enhance student understanding of the ethical standards such that students can effectively apply the critical thinking necessary to practice ethical behavior with clients, professional colleagues, consultees, and the communities in which they work.

575 Internship in Counseling (3-16). Applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, C) School, and d) Substance Abuse. Preregistration by application at least 60 days prior to beginning of semester. Approval by the Division of Counseling Psychology and Counselor Education required. Prerequisite: CPCE 532 and consent of adviser.

589 Special Topics (1-6). A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed in the semester bulletin.

590 Seminar (3). Discussion and evaluation of literature in Counseling Psychology and Counselor Education.

590CF Seminar (3). This is a final seminar for students in the couples and family emphasis area. It is an advanced study of couples and family counseling and related research with a focus on current issues and problems in the profession. Prerequisite: CPCE 541

590SA Seminar - Substance Abuse Counseling (3). Advanced study of substance abuse counseling and related research. Focus on current issues and problems in the profession. Co/Prerequisite: CPCE 532 and CPCE 521

598 Individual Studies (1-6). Review of the research and trends relative to selected problems. By prior arrangement with instructor.

599 Research and Thesis (1-9). By arrangement.

600 Introduction to Counseling Psychology (1). Introduction to the science and practice of professional counseling psychology. Orientation to University of Missouri-Kansas City and the Counseling Psychology Program

605 Career Development II (3). Major theories and research in vocational psychology and career development and implications for the work of the counseling psychologist and counselor. Prerequisite: CPCE 505.

615 Survey of Research in Counseling Psychology (3). Survey of significant research in counseling psychology. Critical evaluation of research procedures, instrumentation, and clinical application of results. Prerequisites: EDRP 605 and EDRP 608.

620 Advanced Theories and Methods of Counseling (3). Personality and learning theories and their implications for professional practice in counseling psychology. Emphasis on critical evaluation of assumptions, methods, comprehensiveness and usefulness of the theories, with reference to related research. Prerequisite: CPCE 532

631 Advanced Counseling Practicum (3). Advanced supervised therapeutic counseling with individuals and supervised consultation in clinical settings. Preregistration by application at least 60 days prior to beginning of semester. Approval by the Division of Counseling Psychology and Counselor Education required. Prerequisite: Completion of CPCE 532 and CPCE 620 with grades of B or better.

632 Practicum in Group Counseling (3). Leading groups under supervision. Focus on problems and experiences of counselors and counseling psychologists when leading groups. Prerequisites: Completion of M.A. in Counseling; CPCE 540. Preregistration by application at least 60 days prior to beginning of semester. Approval by the Division of Counseling Psychology and Counselor Education required.

633 Advanced Couples & Family Practicum (3). Advanced supervised application of theories and methods of family therapy with individuals, couples and families. Preregistration by application at least 60 days prior to beginning of semester. Approval by the Division of Counseling Psychology and Counselor Education required. Prerequisite: CPCE 542.

639 Continuing Advanced Counseling Practicum (1-6). Supervised therapeutic counseling with individuals, beyond the advanced level. Preregistration by application at least 60 days prior to beginning of semester. Approval by the Division of Counseling Psychology and Counselor Education required. Prerequisite: CPCE 631

640 Theories and Methods of Counseling Supervision (2). This course offers an overview of counseling supervision theories and models, exposure to recent research and information about the supervision process, supervisore tasks and roles as well as ethical responsibilities. Admission to the doctoral or education specialist programs in the Division of Counseling, Educational Psychology and Exercise Science is required. Prerequisite: CPCE 631

641 Supervision Practicum (1). This course is designed to provide students with an opportunity to practice supervision. Students will be assigned 2 to 3 counselors-in-training from a CPCE 531/532 practicum class to supervise over the course of a semester. The practicum instructor will provide weekly supervision. Offered: Every Fall Prerequisite: CPCE 640

650 Seminar in Current Issues in Counseling Psychology (3). Professional issues related to counseling psychology and counseling programs. Special emphasis on ethical and legal issues and other professional concerns of counseling psychologists and counselors.

675 Internship in Counseling Psychology (1-16). Applied experiences in a professional setting under supervision of licensed psychologists.

690 Special Problems (1-6). Individual studies; thesis exploration; special reading.

699 Research and Dissertation (1-16). By arrangement.

Curriculum and Instruction Courses

500 Using Community Resources in Teaching K-12 (3). Procedures and techniques for effective use of community resources in classroom teaching. Participants will plan and conduct field trips to selected businesses, industries and institutions in the Metropolitan area.

501 Instructional and Curricular Integration (3). An exploration of the concept of integrating curriculum content and instructional methods and techniques in presenting subject matter drawn from several disciplines. Such subject areas as unified studies, humanities, allied arts, core curriculum, common learnings, environmental studies will be examined. Emphasis will be upon mastering techniques of the integration process, grades K-12.

504 Social Studies in the Elementary and Middle School (3). Trends and new curricular developments in elementary and middle school social studies. Focus on integration of social science concepts, the development of critical thinking skills, and analysis of values.

505 Introduction to Curriculum Theory (3). An introduction to curriculum theory with the recognition that knowledge, power, ideology and schooling are connected to patterns of complexity and contradictions. Emphasis will be placed on curricula that cultivate theoretical discourses about the quality and purpose of schooling and human life.

506 Curriculum Design (3). This course is designed to enhance educators' skills in the areas of curriculum design and interpretation. Students will apply and adapt strategies for curriculum development as well as for interpreting and adapting existing curricula.

507 Sociology of the Non-Motivated Learner (3). Effects of environment on the child with focus on social, school, community and political influences which affect learning and attitudes. An analysis of the "ecology" of these influences; suggestions for dealing with the problems.

508 Curriculum and Methods for Teaching the Non-Motivated Learner (3). Analysis of materials relevant to reluctant learners; student-teacher prepared consumable materials; current research; methods for presenting material.

509 Reducing Risk Factors for Students in Educational & Community Stn (3). The course offers an overview of current research and of special programs that deal with students who are likely to fail at school or in life. The roles of the larger society in helping create such problems will be considered. There will be an emphasis on early identification of such students and a consideration and evaluation of a number of programs designed to help them. The course will also present descriptions of the roles that educators can implement in programs designed for prevention and intervention.

510 Differentiating Instruction Through Teaching/Learning Styles (3). Teaching practices based upon teaching/learning styles are explored and modeled. Through differentiated instruction students learn to use style preferences to meet the needs of learners in a typical classroom including the culturally diverse, at-risk, the remedial, the learning disabled, the gifted, and the special needs students. Differentiation emphasizes learning centers, self-selection, self-pacing, subgrouping, contracting and peer tutoring. (K-12).

511 Developing Multidisciplinary Problem Solving Skills (3). Development of heuristic strategies in problem analysis, information processing, modeling and logical thinking. Study of methods and materials for teaching problem solving strategies, with applications from several school curriculum areas and instructional settings. Use of microcomputers to develop skills.

512 Strategies for Effective Classroom Management (3). The course presents several current approaches to classroom management and how they might be applied to the classroom. The approaches are evaluated in terms of psychological theory and research. Direct experiences with discipline problems are offered through simulation and role-playing.

513 Effective Communication in the Classroom (3). This course will emphasize the relationship between communication and classroom climate, and the influence of communication on motivation and student behavior. Communication with large groups, small groups, and individuals is studied and practiced.

515 Integrated Arts as a Model for Classroom Instruction (3). This course provides background on theory, research and practice in arts education. Students will learn to integrate the arts across the curriculum and explore the value of the arts as conveyors of information, powerful tools of communication and bridges to the broader culture. This course will also give the students the opportunity to create, study and experience in the arts as a model for classroom instruction. Offered: Winter 2000

517 Teaching Methods and Practices (3). This course is designed to present and evaluate basic instructional methods and techniques and to determine the ways in which instruction is affected by the social and cultural context of the school. Offered: Every Fall

520 English Curriculum in the Middle and High School (3). Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examination of program objectives, teaching methods, and instructional materials in English. Prerequisites: A valid, regular teaching certificate; undergraduate special methods or equivalent; teaching experience or consent of the instructor.

522 Language Arts Curriculum in the Elementary and Middle School (3). Consideration of language concepts as they relate to the teaching of the Language Arts in Grades K through 8. Significant research and its application to current trends in teaching the language arts will be explored. Prerequisite: an undergraduate course in Language Arts or reading or consent of the instructor.

523 Advanced Literature for Children (3). History of children's books. Less well-known works of high quality from countries other than Europe, bilingual, and recent translations of books. Prerequisite: TE 401 or equivalent.

531 Diagnosis and Remediation of Mathematics Learning Problems (3). This course addresses the problems of children, youth and adults in basic education, in learning mathematics, whether in the regular classroom or in special environments. Attention is given to the skill of identification of

mathematical conceptual levels and to specific difficulties impeding normal progress. There is a focus on methods and materials of remediation in basic skills and concept development. Relevant research literature is examined.

532 Elementary and Middle School Math Applications and Methods (5). Content and pedagogy for the elementary and middle school mathematics teacher. Methods, techniques, tools, and materials for the effective teaching of mathematics will be studied in the context of practical classroom difficulties. Emphasis will be placed on the teaching mathematics through problem solving, reasoning and connections set in a diverse classroom. Prerequisite: 1 year teaching experience in an elementary or middle school classroom. Offered: Every Summer

536 Specialized Secondary School Curriculum Mathematics (3). Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examinations of program objectives, teaching methods and instructional materials in Mathematics. Prerequisites: A valid, regular teaching certificate; undergradtuate (Special Methods) or equivalent; teaching experience or consent of the instructor.

539 Mathematics Curriculum Development (3). Application of principles of curriculum development to the mathematics content and instructions. Development of a rationale for objectives and content selection and for evaluation. Study and evaluation of current programs, trends and experiments.

540 Evaluation of Computer Software (3). The goals of the course are to provide students with a systematic evaluation process which analyzes the hardware resources and application needs of various user groups. This course provides the student with both an academic understanding of evaluation and requirement analysis for educational user groups. The course includes a practicum activity for application projects.

541 Teaching Mathematics with Computer (3). The use of a variety of technologies and the appropriate software in teaching secondary mathematics will be investigated and the resulting impact on curriculum will be covered. Prerequisite: Mathematics teaching certificate or the equivalent of an undergraduate degree in mathematics.

544 Qualitative Research in English as a Second Language (3). An introduction to methods and techniques of qualitative research for teachers and researchers in English as a second language. Qualitative techniques and methods will be used to research literacy in a variety of authentic contexts, i.e. communities, schools, and households.

545 Language Learning in a Multilingual Society (3). Class will investigate aspects of sociolinguistics and applied linguistics as they apply to English as a second language. Course is one of the requirements for an endorsement to teach in English as a second language classrooms.

546 Literacy Development/Biliteracy (3). Class will investigate current research and practice in literacy development at home and in the classroom in general and on biliteracy in particular. Students will research their own theories and practices in language learning and teaching. Inquiry into early literacy development, adult literacy development, literacy development in an English as a second language classroom and literacy development in multilingual-multicultural class will be conducted. The course is one of the requirements for an endorsement to teach in an English as a second language classroom.

547 Foundations of English as a Second Language: Instruction & Theory (3). The course focuses on the foundations of second language learning and teaching. Questions to be addressed within the class include "How do young people learn a second language?" and "What must English as a second language teachers do to ensure that their students will succeed?" The course is one of the requirements for an endorsement to teach in an English as a second language classroom.

548 English as a Second Language in Content Areas (3). Theoretical perspectives of teaching, learning and researching literacy development. The focus of this course will be on content based English as a second language instruction. The course is one of the requirements for an endorsement to teach in an English as a second language classroom.

549 Practicum in English as a Second Language (3). A four-week practicum for teachers and researchers in the field of second language learning and teaching. Students will have the opportunity to develop their own teaching plan of action according to the curriculum guidelines of the program in which they participate. Students will develop portfolio and reflection piece about their own learning in the practicum.

551 Science Curriculum in the Middle and High School (3). Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examination of program objectives, teaching methods and instructional materials in Natural Sciences. Prerequisites: A valid, regular teaching certificate; undergraduate special methods or equivalent; teaching experience or consent of the instructor.

552 Elementary Science: Concepts and Activities (3). Classroom-tested science activities and investigations designed to develop major concepts and skills appropriate to grades K-9.

553 Curriculum and Instruction in Science (3). Advanced study of contemporary programs and practices in science education at all instructional levels. Examination of program objectives and teaching methods and development of instructional materials for classroom use. Prerequisites: A science teaching methods course and teaching experience, or consent of instructor.

554 Assessment in Science Education (3). Advanced study of science education assessment with option for elementary or secondary emphasis.

555 Student Research Projects in Science (3). This course focuses on increasing the ability of science teachers to help their pupils develop classroom research projects. This will include helping pupils (a) recognize and state problems, hypotheses, assumptions and generalizations; (b) collect and interpret data and draw conclusions; (c) become involved in varied research projects and determine procedures for completing the projects; (d) communicate the results of their research through oral and written presentations and through displays.

560 Teaching and Learning in the Urban Classroom (3). Emphasis will be placed on the examining beliefs, assumptions, values and their influence on the processes of teaching, perception of the urban learner, understanding the characteristics of the urban learner, and processes for transforming pedagogical practices, including fostering collaboration between home and school. Offered: Winter 2001

561 Teaching Diverse Populations in Today's Classrooms (3). This course focuses on culturally responsive pedagogies for meeting the academic needs and learning styles of culturally diverse students. Emphasis will be placed on critical investigation of the role of socio-cultural dynamics on learning and teaching, and design of curriculum, materials, and pedagogical and disciplinary practices that affirm student's culture. The ultimate goal of the course is to examine ways in which a culture-based curricular perspective provides powerful scaffolding for enabling and empowering educational experiences for diverse students. Prerequisite: Consent of instructor.

562 Teaching for Equity and Social Justice (3). This course examines a systems approach to the design, development, assessment, and implementation of school practices that support equity and social justice for all students. It investigates issues of educational inequities and educational empowerment. Practitioners will develop the knowledge, skills and dispositions needed for empowering self and students. Emphasis will be placed on social action learning, empowerment and agency. Prerequisites: EDCI 626. Multicultural Perspectives in Education or Consent of Instructor. Offered: Summer

563 Multicultural Perspectives in Education (3). This course provides an opportunity for students to engage in a critical and in-depth study of multicultural education. Students will examine current theoretical, conceptual, ideological, and political positions that help frame the multicultural education debate. The ultimate goal of the course is to help students develop critical and multiple perspectives about education in a democratic society with the aim of transforming curricular and pedagogical practice. Prerequisites: TE 428 or consent of instructor.

565 Social Studies Curriculum Elementary Education (3). Trends and new curricular developments in elementary school social studies. Focus on integration of social science concepts, the development of critical thinking skills, and analysis of values.

566 Social Studies Curriculum in the Middle and High School (3). Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examinations of program objectives, teaching methods, and instructional materials in Social Studies. Prerequisites: A valid, regular teaching certificate; undergraduate special methods or equivalent; teaching experience or consent of the instructor.

570 Curriculum and Instruction in Technology (3). Study of contemporary programs and practices of technology usage in education at all instructional levels. Examination and application of technologically enhanced teaching methods, assessment, and curriculum development for classroom use. Prerequisites: teaching methods or consent of instructor. Offered: On demand

575 Internship - Early Childhood (3-16). Applied experiences in a planned, supervised curriculum program. Seminar accompanies internship experiences. Prerequisite: Consent of advisor.

576 Administration of Early Childhood Programs (3). This course is designed to examine the administrative functions and decisions involved in effectively directing an Early Childhood Program. Students may plan their own Early Childhood Program incorporating philosophical values and beliefs.

578 Play in Early Childhood Education (3). The purpose of this course is to study the various play theories and developmental levels of play. Students plan play activities and participate in Early Childhood programs.

579 History, Theories, and Issues in Early Childhood Education (3). This course is designed to explore the historical and theoretical principles in early childhood education. Current issues in the field will be examined and discussed.

580 Curriculum in Early Childhood Education (3). The content of this course will include an exploration of appropriate curriculum and instruction of early childhood classrooms. Students will recognize, understand and analyze the differences and similarities between early childhood curriculum and instruction methods and elementary education instruction.

581 Infant-Toddler Programs: Research Theory and Practice (3). This course is designed to investigate the research relevant to infant and toddler programs, learn about the appropriate curriculum and teaching methods, and visit infant and toddler programs.

582 Program Models in Early Childhood Education (3). This course is designed to explore and analyze program models in early childhood education in terms of their theoretical and/or philosophical bases and their transformation into practice. During this process, students are encouraged to evaluate their own personal views and values concerning teaching/learning issues in early childhood education.

583 Supervision in Early Childhood Education (3). The purpose of this course is to study the process of effective supervision of staff in the diverse contexts of early childhood education. This course is designed to prepare students to supervise teachers, staff, paraeducators, or volunteers in early childhood education programs. Students will explore theories of adult development, the supervision process, professional development, and the evaluation process.

584 Early Childhood Culminating Project (1-6). This seminar is designed for graduate students to explore current issues and topics pertaining to the field of early childhood education. An in-depth investigation of ways to work with community agencies will be included.

589 Special Topics in Education (1-6). A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

589SC Special Methods Science (5).

589SE Special Methods English (5).

589SM Special Methods MATH (5).

589SS Special Methods Social Studies (5).

589TM Special Topics in Education (1-6). A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

590 Seminar (3). Discussion and evaluation of literature in curriculum. Prerequisite: EdCI 505 or consent of instructor.

591 Curriculum & Instruction for the 21st Century (3). A seminar including critical examination of current issues affecting schools such as education for democracy and global interdependence in a diversified society, curriculum and instruction in a technological, post-industrial society; the changing demographics of the U.S. and the implications for curriculum and instruction; and the roles of teachers and administrators in the school of the future. Students will be actively involved in "research-in-action" study of both theory and practice.

595 Action Research for Practitioners (3). This course is designed to enable practitioners to engage in systematic inquiry on some aspect of their practice in order to find out more about that practice and eventually improve it. Participants in the course are expected to put their assumptions, ideas and practices to the test by gathering, analyzing and drawing conclusions from evidence.

598 Individual Studies (1-6). Review of the research and trends relative to curriculum in education. By prior arrangement with instructor.

618 Survey of Research in Curriculum (3). Review and analysis of research in curriculum theory and methods.

619 Curriculum Evaluation (3). An examination of the field of curriculum evaluation including development, basic concepts and major evaluation models. Prerequisites: EDRP 508 EDCI 504 or EDCI 505.

620 Seminars in Theories Related to Curriculum (3). Study of major historical developments in curriculum and their influence on contemporary models and practices. Prerequisite: EdCi 504 or EdCI 505.

640 Apprenticeship and Conference in College Training (2-5).

Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. Some attention to student personnel and administration in higher education. By arrangement.

690 Special Problems (1-6). Individual studies: thesis exploration, special reading.

697 Dissertation Curriculum and Instruction (1-16). By arrangement.

Education Courses

501 Teaching of Reading (3). Basic theory and practice in reading instruction, with attention to individual needs. Prerequisite: EDUC 333 or equivalent to TE 415.

534 Reading Assessment and Evaluation (3). Study of procedures and instruments for characterizing and evaluating reading and related educational factors and skills. Students will administer and interpret ability tests customarily used in diagnosing reading problems. Prerequisite: Educ. 501 or equivalent.

542 Introduction Diagnostic-Treatment Procedures in Reading (3). Identification and classification of reading disability; role of the Special Reading Teacher; factors related to reading disability; special techniques used in remedial reading instruction; analysis of reading performance.

552 Advanced Diagnostic and Treatment Procedures in Reading (3). Significant aspects of reading disability; diagnostic testing; case report writing; interpretation of test data; implications of test data for recommendations. Prerequisites: Educ. 542 and permission of instructor. May be taken concurrently with Educ. 575R.

575Q Internship in Early Childhood Education (3-16).

575R Internship in Reading (3-16).

589PT Practicum in Teaching a Culturally Diverse Society I (2).

589TC Teaching in a Culturally Diverse Society (1).

590R Seminar in Reading (3).

598 Individual Studies (1-6). Review of the research trends relative to selected problems in education. By prior arrangement with instructor.

598A Individual Studies in Administration (1-6).

598B Individual Studies in Mathematics (1-6).

598C Individual Studies Curriculum (1-6).

598H Individual Studies Higher Education (1-6).

598J Individual Studies Philosophy of Education (1-6).

598P Individual Studies Educational Psychology (1-6).

598Q Individual Studies Early Childhood Education (1-6).

598R Individual Studies Education Reading (1-6).

598S Individual Studies Research (1-6).

598SA Individual Studies Research (1-6).

598U Individual Studies History of Education (1-6).

598X Individual Studies Sociological Foundations (1-6).

599 Research and Thesis (1-9). By arrangement.

601 Organizing and Guiding the Reading Program (3). An investigation of several procedures for organizing developmental and special reading programs with emphasis on effects of such plans on the role of the reading specialist and the impact on the school environs. Prerequisites: Educ. 542 and Educ. 527.

650 Seminar in Dyslexia and Related Learning Disabilities (3). A systematic study of the likely etiology and treatment of dyslexia and related learning disabilities. Topics include: hereditary, sensory-motor, perceptual-motor, and psychological and neurophysiological problems. Prerequisite: Educ. 542, 552, 575 or consent of instructor.

690 Special Problems (1-6). Individual studies; thesis exploration, special reading.

695 Doctoral Dissertation: Reading Education (1-16). By arrangement.

696 Dissertation Administration and Community Leadership (1-16). By arrangement.

697 Dissertation Curriculum and Instruction (1-16). By arrangement.

698 Dissertation General Education (1-16). By arrangement.

899 Required Graduate Enrollment (1).

Research and Psychology Courses

502 Advanced Educational Psychology (3). Critical examination of the contributions of psychological principles and findings to the field of education.

505 Statistical Methods I (3). Non-theoretical approach to statistical procedure, including introduction to simple analysis of variance.

508 Principles and Methods of Research (3). Introduction to the analysis of research literature including types of research, methodology, design and data analysis.

510 Child Behavior and Development (3). Growth, maturation, and learning processes in children. Offered: Every semester.

512 Adolescent Development and the School (3). An overview of adolescent development from preadolescence to adulthood, focusing on major theories and aspects of adolescent development, critical issues of adolescence today, and the role of professional educators in facilitating positive development.

513 Life Span Human Development (3). This course introduced students to the theories and research of biological, cognitive, social and personality development across the lifespan, within the layers of context of people's lives. Special attention is given to the role in development of social class, gender, ethnicity and culture. Offered: Every Winter

522 Principles of Testing (3). Measurement theory, uses and limitation of assessment procedure.

575 Internship (**3-16**). Applied experiences in a planned, supervised program in research or educational psychology. Prerequisite: Consent of advisor.

576 Educational Technology (3). History of responsive technology in education, principles of learning and strategies in programming instructional materials, methods of evaluation, and current research methodologies in educational technology.

589 Special Topics in Education (1-6). A course designed to deal with a topic in educational research or educational psychology which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

589CP Special Topics in Education (1-6).

589DB Special Topics in Education (1-6). A course designed to deal with a topic in educational research or educational psychology which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

590 Individual Studies (1-6). Review of the research and trends relative to selected problems in educational research or psychology: By prior arrangement with instructor.

605 Quantitative Analysis I: Regression and Analysis of Variance (3). This graduate level statistics course for students in education and the behavioral sciences provides a strong conceptual understanding of two major statistical procedures within the context of the general linear model: multiple regression and numerous analysis of variance (ANOVA) models. Students will learn to select appropriate statistical techniques, test the assumptions of the techniques, analyze data using statistical software, and report the results of their analyses in the format of the American Psychological Association (APA,2002). Prerequisites: An introductory inferential statistics course EDRP 505, PSY 316) and basic knowledge of research design (EDRP 505, PSY 302). Cross-listed: PSYCH 516 Offered: Fall.

606 Quantitative Analysis II : Multivariate Data Analysis (3). This graduate level statistics course for students in the behavioral science and education provides a strong conceptual understanding of advanced topics in regression (interaction effects, logistic regression, path analysis) and various multvariate techniques (MANOVA, canonical correlation, factor analysis). Students will complete a series of data based projects that allow them to demonstrate their skills in analysis, reporting, and interpretation of findings. Prerequisites: EDRP605/PSY516 and basic knowledge of and SPSS OR SAS software and research design (EDRP505, PSY302). Cross-listed: Psych 517 Offered: Winter.

608 Introduction to Graduate Research (3). This course is an introduction to quantitative and qualitative research methods. Students in the course develop a research proposal on an approved topic of their choice.

610 Research Design & Methodology (3). An introduction of methodology and design in the behavioral and health sciences. The course will cover: (a) the key terms and concepts of design and methodology, (b) how to apply those concepts to the construction and criticism of designs., and (c) ethnical issues for conducting human and animal research. Crosslisted with PSYCH 601. Prerequisite: EDRP 605

615 Qualitative Research Theory & Design Educational Setting. Part 1 (3). Students will be introduced to qualitative research theory and design. Prerequisite: EDRP 505 and 508

616 Qual Data Collection and Analysis in Educational Settings. Part 2 (3). Students will gain experience in qualitative data collection and analysis. Prerequisite: EDRP 615

625 Program Evaluation for Education & Social (3). Program evaluation is an applied research area that focuses on providing summative and formative data about the progress of an organization or program. This doctoral seminar will focus on learning to identify the goals, objectives and assumptions inherent in a program, and on designing a methodology to assess progress towards the goals. All students will develop a comprehensive evaluation plan for a program of their choice. Prerequisites: EDRP 505, EDRP 522, and EDRP 508 or EDRP 608.

640 Apprenticeship and Conference in College Training (2-5). Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. By arrangement.

690 Special Problems (1-6). Individual studies; thesis exploration, special reading.

698 Dissertation in Educational Research & Psychology (1-16). By arrangement.

Special Education Courses

504 Characteristics, History, and Theories of Learning Disabilities (3). Examination of definition, classification, incidence, and etiology of learning disabilities focuses on characteristics of learning disabled children and youth, and on historical and theoretical issues in the field. Prerequisite: TE 404 or EdSp 407.

505 Career Education and Transition in Special Education (3). This course is designed to increase awareness and knowledge about current disabilities legislation, vocational education, vocational rehabilitation, quality transitior programs, school to work, self advocacy, workplace accommodations and comprehensive life skills learning. Prerequisite: EDSP 407 or equivalent

517 Characteristics, Hist & Thrys: Emotional Disturbance In Children (3). An investigation of theories, classification, etiology, incidence, and characteristics of children with emotional/ behavioral disorders.

519 Learning Disabilities: Basic Skills Disorders (3-6). This methods course focuses on the diagnostic and remedial procedures for skill deficits (reading, writing, spelling, and arithmetic problems) manifested in children and youth who have learning disabilities. Prerequisite: EdSp 560, EDUC 542, EDUC 542, TE 413, EDUC 522 or consent of instructor.

536 Language Development of Exceptional Children (3). Issues in the language development of children and youth with exceptionalities will be compared with typical language development. General methods of language assessment and remediation will focus on, but not be limited to students with cognitive disabilities, learning disabilities, behavior disorders, hearing or vision impairments, speech disorders and/or physical handicaps.

539 Educational Strategies with Behavior Disorders (3). The study and application of learning principles, educational strategies, and relevant research to the education of individuals with behavioral disorders. Prerequisites: EdSp 407 and EdSp 560. TE 404 or EdSp 530.

543 Learning Disabilities: Communication Disorders (3). Studies of both normal and abnormal language processes and development; training in procedures of diagnosing and remediating various communication disorders of exceptional children and youth. Prerequisite: EdSp 560 and EdSp 561.

550 Social&Affective Interventions for Stdnts with Emotional

Disorder (3). In this course, the student will be encouraged to reflect critically on methods of combining academic and social/ affective curricular goals for children and youth with emotional disorders. It is expected that students will begin to develop the skills necessary to implement a variety of teaching strategies and curricula in relation to their effectiveness for meeting a child's or youth's needs. Prerequisites: EDSP 407, EDSP 517 or EDSP 504, EDSP 539 or equivalents.

562 Learning Disabilities: Cognition and Perception (3). Studies of the cognition and perception of learning disabled children and adolescents include development, disorders, diagnostic and remedial approaches, theories and controversies. Appropriate and inappropriate uses of tests, commonly used to measure cognition and perception, are evaluated. Prerequisites: EdSp 560, EdSp 561 and EDUC 522.

575 Internship in Special Education (4). Applied experiences in special education program. Action research project required. Seminar accompanies internship experiences. Prerequisites: Consent of instructor and submitted application.

581 Practicum in Emotional And Behavioral Disorders (6). In a supervised practicum with children and adolescents with emotional and behavioral disorders, students will engage in assessment, educational planning, behavior management, and instruction with this population. Prerequisites: Consent of instructor and submitted application.

583 Practicum in Learning Disabilities (6). In a supervised practicum with children and adolescents with learning disabilities in public school or residential settings, students will engage in assessment, educational planning, behavior management and instruction with this population. Prerequisites: Consent of instructor and submitted application.

585 Issues and Trends in Special Education Assessment (3). This course provides a background in the critical analysis of the many and varied assessment issues confronting the field of special education. Students will develop the skills necessary to implement a variety of formal and informal assessment procedures which can be used for initial identification and placement or for evaluation of children and adolescents with exceptionalities. Prerequisites: EDSP 407 or equivalent. Offered: Fall 2000

589 Special Topics in Education (1-6). A course designed to deal with a special education topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

589EC Special Topics in Education (1-6). A course designed to deal with a special education topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

590 Seminar (3). Discussion and evaluation of literature in special education administration. Prerequisite: Consent of instructor.

597 Parent-Teacher Cooperation/Special Needs-Students (3). This course is a study of parent-teacher-cooperation in special education, remedial education, and rehabilitation services for students with special needs. The focus of the course is on presenting strategies for special educators to work with parents and families.

598 Individual Studies (1-6). Review of the research and trends relative to selected problems in special education. By prior arrangement with instructor.

Urban Leadership Courses

501 Foundations of School Leadership & Organization (5). Participants will study as cohort team members actively engaged in clinical/practical endeavors in schools, concepts and theories focused: 1) to understand and apply modern leadership and organization development theory in relation to school organizational cultures; 2) to understand both the development of productive school relationships and the theoretical concepts of the legal responsibilities of schools in the society; 3) to develop a plan for principal certification based upon participant needs and experiences; and 4) to build school cultures that are collaborative, participative, reflective, and self renewing.

502 Building Administration and Management (5). Participants will study and apply theories and concepts as members of a Cohort Team doing clinical work in schools designed to study, learn, and practice the management and administrative responsibilities of building level leaders including principal roles, personnel issues, school business management, community relations, supervision of staff, and to know the legal responsibilities relating to teachers, student and public rights.

503 Student, Staff and Organization Development (5). Participants will study as a member of a cohort team doing clinical work in school and developing the ability: 1) to gain knowledge of, and practice in developing "learning organizations"; 2) to assist teachers and other staff members of a school in structuring classrooms around the learning and development of all students; 3) to lead and develop urban schools that are culturally diverse where learner outcomes and performance are not related to race, class, or gender; and 4) to provide leadership related to developing school structures that are outcome oriented.

504 Elementary School Administration (3). Contemporary knowledge, understanding, and competencies for elementary administration. Focus on leadership, communication, group processes, organization, fiscal, and political areas. In addition, basic roles and responsibilities of the school principalship are addressed.

505 Middle School Administration (3). Middle school goals, effective middle school leadership, change models for staff development, relevant curricula, auxiliary and support systems.

506 Secondary School Administration (3). Organization and objectives of secondary education; curriculum trends; role analysis; principal-staff relations. Prerequisite: EDUL 501 or consent of advisor.

507 School Supervision (3). Principles of supervision, factors influencing effectiveness of instruction, including the evaluation of teachers.

508 Special Education Administration (3). Provides special educators, special education and regular education administrators with knowledge and experience in the areas of special education process, policy development, data collection and funding, legal issues and program organization. Special emphasis is given to dealing with common problems which arise in public school special education programs.

510 Planning Educational Facilities (3). Analysis of educational specifications; cooperative planning processes; analysis of trends in school facilities; financial considerations and construction research. Visitation of selected facilities included.

511 Public School Business Administration (3). The business related aspects of administering a school district including budgeting and accounting, purchasing, transportation, insurance, and facilities management.

512 School Finance (3). Sources of revenue for public education; distribution of monies for education; budget construction; accounting procedures; and theories for financing education.

513 School Personnel Administration (3). Study of processes, policies and theory concerned with the personnel function in educational administration. Emphasizes the importance of human resources in developing effective educational systems.

514 Public Relations in Education (3). Analysis of various public views on education; mass communications and social change; public relations programs.

515 Governmental and Legal Aspects of Education (3). Current and recent legislation affecting education; court cases related to education; emerging patterns of modern juris-prudence; administrators' responsibilities regarding legal decisions.

516 Governmental and Legal Aspects of Special Education (3). An examination of current and recent legislation affecting special education; emerging patterns of modern jurisprudence; and special education teacher and administrator legal responsibilities.

520 School Administration in a Metropolitan Context (3). Sociological and philosophical study of school administration in metropolitan areas. Major trends: experimental projects conducted in urban school systems; organizational patterns and communication networks.

522 School Organizational Culture as the Context of Change (3). This course is designed to enable students to understand that schools as organizations develop cultures and that this culture establishes relationships and conditions in schools for students, teachers, and administrators. Students will develop an understanding of the culture of a school and its influence on efforts to achieve substantive change or reform.

523 Administrative Roles for Instructional Leadership (3). This course meets a requirement for administrator certification in Missouri and Kansas in the area of school improvement and leadership. The course focuses upon leadership roles necessary for creating a supportive climate for change and for implementing improved instructional programs.

524 Philosophical Inquiry and Education (3). An examination of issues, problems and controversies discussed in educational and related literature, utilizing criteria and techniques of logical and philosophical analysis. The focus is on the development of critical thinking abilities as applied to theories, positions and arguments in educational and related contexts.

525 Cultural Foundations of Education (3). Examines education and schooling as cultural phenomena. This course focuses on an analysis of education and schooling as both cultural transmission and cultural change and the practical implications. Also included is a philosophical/ theoretical examination of varying relationships between dominant and minority cultures.

526 Philosophical Foundations of Education (3). Introduction to the study of philosophical problems implicit in educational issues. Focuses on the application of a number of philosophical concepts and skills to a variety of controversies, policies, and theories in education.

527 Historical Foundations of Education (3). Study of the development of educational policy, practice, and theory in relation to changes in social institutions and thought. Focuses on the analysis of contemporary educational problems in the light of historical perspectives.

528 Sociological Foundations of Education (3). An analysis of issues involving the role of schools in society, the relationship between education and other social institutions, and contemporary social developments which have major implications.

550 Organization and Administration of Higher Education (3). Organizational patterns; administrative roles and procedures; establishment of policies, institutional development; and public and private financing of higher education.

551 Student Affairs Administration in Higher Education (3). Study of the objectives, organizational structure, and current issues of student affairs administration as they relate to the academic program, the campus environment, and the needs of students; analysis of the functions of different services.

552 Financial Aspects of Higher Education (3). This course is designed for graduate students with a basic understanding of the area of Higher Education Administration. The course examines basic concepts and principles of finance in higher education in the United States. Students are expected to: Develop an understanding of 1) the issues and fiscal problems of higher education, 2) the roles and responsibilities of financial officers in higher education, and 3) possible future trends in the financing of higher education.

555 Community College (3). Investigation of the purposes, programs, and the problems in the American junior college movement; analysis of the structure, governance, and financial support of community colleges.

556 The College Student (3). An examination of today's college students. Review and study of demographics, relationships of students and colleges, nature of student communities, new student populations and the impact of college on students and their educational development.

557 Legal Aspects of Higher Education (3). Study of legal issues within higher education. Focus is on state and federal law and regulations as they pertain to issues ranging from academic freedom to governance and administration. Focus on strategies for preventive law is a major component of the course.

558 Student Development Theory (3). A critical examination of student development theories and related research. Designed to provide an understanding of how students and their environments interact in the collegiate setting.

559 Current Issues in Higher Education (3). A course responsive to the contemporary issues in college and university administration, addressing interesting and important topics that fall outside the scope of other courses in higher education curriculum. Students will have an overview of the organization of American higher education and will explore source materials available for higher education research.

560 Leadership in Higher Education (3). Focus on leadership, connections among different approaches to leadership, different forms of power, and different leadership behaviors. A series of opportunities to think systematically about leadership and to increase a student's personal leadership capacities in higher education will be provided.

562 Gender & Leadership in Educ: Implications for Prof.

Effectiveness (3). This course is for women and men who want to understand better the unique challenges and opportunities facing leaders in today's educational organizations. Exploration of connections between gender and leadership is the focus of study. Students will probe linkages between gender and practice.

564 History of Higher Education (3). Study of the evolution of the constituencies within different types of American higher education institutions. The development of professional, practical, and graduate education will be examined as will 20th century alternatives to the liberal arts colleges and research university models.

565 Metropolitan University (3). This course presents past, current and emerging trends from both practices and research in the Metropolitan University. A variety of issues and topics, which reflect changes, will be examined. This is a seminar course which will require a significant degree of student participation in a classroom discussion where each student is expected to come with questions, insights and/or perspectives which address issues and concerns presented.

570 Administrative Practicum Higher Education (3-6). Assigned administrative responsibilities under supervision of practicing higher educational administrator, seminar and written project accompany field experiences. Prerequisite: Consent of advisor.

571 Internship in Higher Education (3-16). Applied experiences in a planned, supervised program. Seminar accompanies internship experiences. Prerequisite: Consent of advisor.

572 Higher Education Administration: The Profession (3). A course to introduce the prospective or new student affairs professional to all facets of higher educational administration. The course provides a balance of presentations by student affairs professionals, participation and observation in a variety of higher education offices and individual research projects. It is anticipated that students will visit several institutions of higher education and will participate in a service-learning project.

574 Administrative Practicum (3-6). Assigned administrative responsibilities under supervision of practicing educational administrators seminar and written project accompany field experiences. Prerequisite: Consent of advisor.

575 Internship in Administration (3-16). Applied experiences in a planned, supervised educational administration program. Seminar accompanies internship experiences. Prerequisite: Consent of advisor.

589 Special Topics in Educational Leadership (1-6). A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

589EL Special Topics in Educational Leadership (1-6). A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

590 Seminar (3). Discussion and evaluation of literature in Education Administration. Prerequisite: Consent of instructor.

598 Individual Studies (1-6). Review of the research and trends relative to selected problems in education. By prior arrangement with instructor.

601 Research in Education Administration: Qualitative Theory &

Design (3). First of two courses in advanced qualitative research in higher education and educational administration. Focus is on the theory and design of qualitative work. Students will become familiar with the various ontological, epistemological, and methodological assumptions that guide research in the social sciences and be able to make informed choices about inquiry techniques for dissertation and future research.

602 Seminar in the History of American Urban Education (3). A study of the historical development of American urban educational institutions and ideas and of how that development is embedded within the broader context of social, political, and economic change in the united States.

603 Research in Education Administration: Qualitative Data &

Analysis (3). Second of two courses in advanced qualitative research in higher education and educational administration. Focus is on data collection and analysis in qualitative work. Students will become familiar with various data gathering techniques and devices for interpreting qualitative data and drawing meaningful conclusions. This information will guide students in dissertation and future research. Prerequisite: EDUL 601, or permission of instructors.

616 Analysis of Educational Theory Formation (3). Study and application of criteria for evaluating the adequacy of educational theories and evaluating the relevance to theories of research studies.

626 Theory in Educational Administration (3). Leadership theories and research; bureaucracy and organizational processes; new directions in organizational analysis; sociological and psychological concepts in school administration. Prerequisites: EDUL 501 or equivalent.

627 Advanced Educational Supervision (3). Principles and concepts of educational supervision and implementation. Prerequisite: EDUL 507 or equivalent.

628 The Superintendency (3). Analysis and overview of the nature, functions and activities of the public school superintendency including: historical and philosophical foundations; board-staff and other governing body relationships and functions; professional staff relations and management; public relations and communication; inter-governmental relations and responsibilities, and the functions of planning, direction and supervision of the instructional enterprise. Prerequisite: Consent of instructor.

635 Topics in Higher Education (3). Organization of higher education, public and private financing; accreditation; academic freedom; policy development; community relations; curricular patterns, selected current issues. Prerequisite: EDUL 550 or equivalent.

640 Apprenticeship and Conference in College Training (2-5).

Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. Some attention to student personnel and administration in higher education. By arrangement.

655 Studies in Philosophy of Education (3). Study of special topics in the philosophy of education. Prerequisite: EDUC 523/EDUL 526 or permission of instructor.

660 Effective Practices II (3). This course builds on the general understanding of leadership and professional practices developed in Leadership in Education Effective Practices I. The course addresses key leadership challenges and decision making in today's complex work world. The course uses reading on selected issues, case discussions, and role plays to move beyond theory and understanding to application and effectiveness.

685 Problems and Issues in Education & Urban Leadership (3). This course serves as the capstone class for all doctoral students in education. The course requires analysis of successful dissertations in urban education and prepares students to write their own dissertation relative to urban study and education.

690 Special Problems (1-6). Individual studies; thesis exploration, special reading.

696 Dissertation Administration and Community Leadership (1-16). Culminating written research project for doctoral students in Urban Leadership and Policy Studies. Consent of advisor.

School of Graduate Studies

300F Administrative Center 5115 Oak Street (816) 235-**1161** graduate@umkc.edu http://www.umkc.edu/sgs

Mailing Address

University of Missouri-Kansas City School of Graduate Studies 300F AC 5100 Rockhill Road Kansas City, MO 64110-2499

Dean:

Ronald A. MacQuarrie

General Information

The School of Graduate Studies is responsible for monitoring compliance to the campuswide minimum graduate academic regulations, which are explained in detail in the General Graduate Academic Regulations and Information section of this catalog. Working with and through the Graduate Council and Graduate Officers Committee the School also provides leadership and coordination of all graduate programs, offers programs to prepare graduate students for faculty positions in a variety of educational settings, and administers a number of competitive graduate fellowships.

The School also serves as the academic and administrative home for students admitted to the Interdisciplinary Ph.D. program. All other graduate students are admitted to the School or College in which their degree programs are housed.

Interdisciplinary Ph.D. Program Mission, Philosophy and History

The world of the future will require scholars with a global approach to problem solving. It will no longer be enough to know one area, one discipline, one field. Inquiry and discovery are crossing disciplines. For example, the insights of the science of chaos are the products of mathematics, computer science, meteorology, astronomy and biology. Study of aging draws on sociology, psychology, pharmacy, the life sciences and education. For this reason, in 1990, UMKC developed and introduced an interdisciplinary doctoral degree program that spans traditional boundaries among disciplines.

The goal for interdisciplinary Ph.D. studies at UMKC is to help students develop knowledge and skills for independent research on the fundamental questions of the present and the future. The program is designed to provide self-directed students with academic training at the highest level, while allowing their participation as colleagues in research of fundamental importance. UMKC is dedicated, within the framework of its interdisciplinary program leading to the Ph.D., to provide education of the highest quality.

Scholars in the program fully participate in their own learning, guided by our philosophy that facts must be tempered by values and that true excellence in scholarship demands a far-reaching context of knowledge. The program has grown rapidly. In the winter 2003 term, more than 336 students were enrolled in the Interdisciplinary Ph.D. program. Nearly 230 students have graduated during the program's existence.

The following four core values underscore UMKC's Interdisciplinary Ph.D. program:

Learning is enhanced by a search for knowledge across discipline boundaries. *Therefore, the program:*

• Is student-centered;

- Enables students to acquire the skills of interdisciplinary scholarship and research;
- Broadens students exposure to multiple academic fields.

Interdisciplinary research draws on discipline-based knowledge, generating integrated solutions to problems that cross discipline boundaries. *Therefore, the program:*

- Is problem-oriented;
- Integrates the attributes of a broad-based interdisciplinary approach with the grounding of a traditional academic focus;
- Provides a solid grounding in theories, concepts and methodologies of two or more disciplines.

Learning thrives in an environment open to a diversity of ideas, cultural backgrounds, discipline perspectives, and approaches to problems. *Therefore, the program:*

- Instills an appreciation of different disciplines;
- Integrates the disciplinary perspectives to give students the methodological and theoretical tools to thrive in a wide range of scholarly and professional environments.

Society derives great benefit from collaborative efforts that transcend discipline boundaries to solve problems. *Therefore, the program:*

- Prepares individuals to be multi-functional; to combine disparate skills to solve problems;
- Provides opportunities for individuals to gain skills in working within a collaborative environment.

Program Administration

Quality control of the Interdisciplinary Ph.D. program rests with those faculty members certified by the University of Missouri to chair and serve on doctoral supervisory committees. These doctoral faculty members are responsible for the design and implementation of a student's doctoral plan of study and for the assessment of the qualifications of a student they recommend to the curators for the Ph.D. degree. To help students formulate an appropriate plan of study, the doctoral faculty are divided into five broad groups corresponding to research interests and expertise. The groupings do not preclude an interdisciplinary plan of study and research involving more than one of these five groups, but are intended only to provide a structure that will assist students and doctoral faculty in developing a plan of study for each Interdisciplinary Ph.D. student.

A 15-member Executive Committee of the doctoral faculty, chaired by the dean of the School of Graduate Studies, formulates the policies that govern interdisciplinary Ph.D. studies. Ten members of the committee are elected by the doctoral faculty. The chancellor, in view of the election results and in consultation with the dean of the School of Graduate Studies, appoints five members. There are three members from each of the five broad research areas. This process ensures representation from across the primary areas of responsibility assigned to the campus by the curators. The Interdisciplinary Ph.D. Executive Committee also is charged with formulating, monitoring, and reviewing goals of the Interdisciplinary Ph.D. program and recommending changes in goals, procedures and policies to the faculty. Any proposed major change must be ratified by the doctoral faculty of the campus.

Program Description

Applicants must meet both the general and the discipline-specific criteria for admission and be recommended for admission by the doctoral faculty review groups in at least two disciplines. Upon approval by the graduate dean, students are admitted to the School of Graduate Studies. The School of Graduate Studies monitors student progress in the program, enforces program regulations, and facilitates communication among the disciplines. A discipline coordinator, usually a doctoral faculty member, coordinates admission reviews and tracking of students within each discipline.

Doctoral students in this program take coursework and conduct their research in at least two disciplines. The content of their program of study is not predetermined, but formulated by them, in consultation with UMKC doctoral faculty, to meet their individual needs and research interests, satisfy discipline-specific requirements, and ensure that upon graduation they will be able to:

- Demonstrate appropriate depth and breadth of knowledge in their disciplines;
- Use skills of interdisciplinary scholarship and research to integrate multiple discipline perspectives;
- Understand and value diverse approaches to problems;
- Work effectively in a collaborative environment;
- Effectively communicate results of their research to diverse audiences.

Disciplines participating for the fall 2003 admissions cycle:

Administrative and Information Sciences

Public Affairs and Administration (Henry W. Bloch School of Business and Public Administration) Urban Leadership and Policy Studies in Education (School of Education)

Biological and Chemical Sciences

Cell Biology and Biophysics (School of Biological Sciences)

Molecular Biology and Biochemistry (School of Biological Sciences) Chemistry (College of Arts and Sciences) Oral Biology (School of Dentistry) Pharmaceutical Sciences (School of Pharmacy)

Pharmaceutical Sciences (School of Pharmacy) Pharmacology (School of Pharmacy)

Humanities and Arts

Art History (College of Arts and Sciences) English (College of Arts and Sciences) Music Education (Conservatory of Music) Religious Studies (College of Arts and Sciences)

Physical, Mathematical, Engineering and Computer Sciences Engineering [School of Interdisciplinary Computing and Engineering (SICE)]
Geosciences (College of Arts and Sciences)
Mathematics (College of Arts and Sciences)
Physics (College of Arts and Sciences)
Computer Networking (SICE)
Software Architecture (SICE)
Telecommunications Networking (SICE)

Social and Behavioral Sciences

Economics (College of Arts and Sciences) Education (School of Education) Health Psychology (non-clinical track) (College of Arts and Sciences) History (College of Arts and Sciences) Political Science (College of Arts & Sciences) Psychology (College of Arts and Sciences) Sociology (College of Arts and Sciences) Social Sciences Consortium: Economics,

Political Science and Sociology (only available as a co-discipline option) The above list of participating disciplines constitutes a dynamic list that can change annually as members are added to or dropped from the doctoral faculty, or as the resources in various academic units change. Applicants should contact the School of Graduate Studies Office for information about modifications to the above list that might have occurred since this catalog was prepared.

Admission to UMKC's School of Graduate Studies' Interdisciplinary Ph.D. program is highly competitive. Enrollment in the program is limited, and admission is granted only to students who have a mature commitment to advanced study and scholarship. Admission also is subject to availability of adequate faculty and other resources within an applicant's chosen disciplines.

After being admitted to the Interdisciplinary Ph.D. program, and no later than the end of the semester in which the student completes his or her comprehensive examinations, each student must satisfy the interdisciplinary doctoral residency requirement by completing at least 21 credits, exclusive of dissertation research (696-699), in no more than 18 months. Students may be admitted either provisionally or fully to the program; however, within the first 12 months of being fully admitted, each student must develop a Plan of Study proposal in consultation with the doctoral faculty members who have agreed to serve on the student's supervisory committee. Although no fixed set of courses is required, students are expected to prepare a rigorous plan of study that includes at least 30 didactic course hours beyond the baccalaureate degree, exclusive of thesis and dissertation research credits. More credit hours may be required by either the student's supervisory committee, the student's disciplines, the Interdisciplinary Ph.D. Executive Committee, or the dean of the School of Graduate Studies. The number of credits included on the plan of study shall be predicated upon the extent of the student's previous academic preparation, the discipline-specific requirements of the student's disciplines, and the nature of the student's field of study.

Students must take and pass a comprehensive examination containing components of each discipline to which they have been admitted to determine if they are ready to advance to candidacy and the final phases of their Ph.D. program. Typically the comprehensive examination will be conducted as the student nears completion of the didactic coursework listed on his or her plan of study. The final phases of the program shall comprise:

- Completion of significant research;
- A written dissertation acceptable to the doctoral faculty;
- Successful oral defense of the research work and dissertation.

Application Procedure and Minimum Criteria for Admission

When preparing an application for admission, applicants must choose two or more disciplines of primary interest. The applicant also must designate which one of the disciplines is to become the applicant's coordinating unit for initial advising, record-keeping, and receiving/sending mail in the event that admission is granted. A student's research adviser must be affiliated with the student's coordinating unit discipline.

Application for admission to Interdisciplinary Ph.D. study is made to the dean of the School of Graduate Studies through the UMKC Admissions Office or, in the case of international applicants, through the UMKC International Student Affairs Office (ISAO). Applicants may obtain a special application packet by contacting the UMKC School of Graduate Studies office, located in Room 300F Administrative Center; 5115 Oak St. E-mail requests may be sent to graduate@umkc.edu; the phone number is (816) 235-**1161**. Application materials are also available to download from the Web site: http://www.umkc.edu/iphd.

Mailing Address

University of Missouri-Kansas City School of Graduate Studies 300F AC 5100 Rockhill Road Kansas City, MO 64110-2499

The general criteria for admission for Interdisciplinary Ph.D. program study are as follows:

- Graduate Record Examination (GRE) scores will be evaluated by the disciplines [If an applicant's GRE scores are more than 7 years old, and other predictors of ability to do doctoral-level work in the applicant's file are marginal, the applicant may be asked to retake the GRE general test before an admission decision is made];
- A grade-point average of at least 2.75 (on a 4.0 scale) covering all college work taken prior to the bachelor's degree, or a grade-point average of at least 3.0 covering all post-baccalaureate work completed to date;
- Recommendation for provisional or full admission by the doctoral faculty review group in **at least two** participating disciplines.

Applicants for whom English is not the native language must have a TOEFL score of at least 550 on the paper-based test or 213 on the computer-based test. In addition, to qualify for full-admission status and be able to begin satisfying the program's residency requirement, international students must achieve a score of at least 4.0 on the Test of Written English (TWE) portion of the TOEFL examination. Students admitted provisionally because of the TWE requirement may take a TWE equivalency test through UMKC's Applied Language Institute once they arrive on campus.

Participating disciplines may establish whatever additional criteria or higher standards they consider to be appropriate and such discipline-specific criteria will take precedence over the general criteria. Applicants should note that several discipline areas have set more rigorous admission requirements, and a number of discipline areas have established qualifying requirements for students who intend to include that discipline in their doctoral programs. These discipline-specific requirements range from specific prerequisite coursework, to successful completion of a qualifying examination, to having the equivalent of a master's degree in the area, to having higher scores on specific segments of the GRE, and are listed in greater detail later in this section.

Students may apply for admission with or without meeting the general criteria of the School of Graduate Studies and any additional criteria established by the discipline areas. Meeting these criteria does not automatically make any student eligible for admission. In exceptional circumstances, students who do not meet the general criteria of the School of Graduate Studies and the disciplines may be admitted.

The School of Graduate Studies' minimum requirements for admission to the Interdisciplinary Ph.D. program are determined by the doctoral faculty in the academic units in which the student will be doing work, and by the UMKC doctoral faculty through representation on the Interdisciplinary Ph.D. Executive Committee. Admission to the program is subject to availability of adequate faculty and other resources within an applicant's chosen disciplines and the approvals of the dean of the School of Graduate Studies and the Interdisciplinary Ph.D. Executive Committee.

Application Procedure

The **preferred** deadlines for application:

Fall Semester or Summer Session: February 1 Winter Semester: September 1

Although new students may be accepted in all terms, because of course sequencing, it is recommended that students enter the program in the fall semester, and applicants are advised that some disciplines will only consider applications for the fall term.

Applicants are responsible for:

- 1. Submitting a completed **Application for Admission or Readmission to Interdisciplinary Ph.D. Studies** form to the UMKC Admissions Office, or in the case of international applicants, to the UMKC International Student Affairs Office (ISAO). All applications must be accompanied by the appropriate non-refundable application fee (\$35 for domestic applicants or \$50 for international applicants).
- 2. Submitting a *one-page narrative statement* outlining professional background and educational plans with the completed application form.
- 3. Having the following supplementary documentation sent to the UMKC Admissions Office:
 - Official test scores (GRE, TOEFL, etc.). The applicant must request the testing agency to send official GRE test scores to the School of Graduate Studies. The Educational Testing Service does not report GRE scores more than 20 years old or scores more than five years old but earned since September 30, 1985.
 - Official transcripts from all colleges attended. All applicants must submit an official transcript from the school where their bachelor's degrees were obtained. This transcript must show all courses, grades and credits attempted or completed at the undergraduate level. Unless the transcript of the degree-granting institution shows the complete record of undergraduate work taken at all other schools, an official transcript from each of the other institutions must be supplied. In addition, applicants must submit an official transcript from each school where other coursework has been taken or degrees have been obtained after the bachelor's degree.
 - Three Recommendations for Interdisciplinary Ph.D. Study forms.
 - Any supplemental material requested by the discipline(s). Note that several disciplines require professional writing samples, tentative outlines of plans of study, resumes, or other supplemental materials to complete the application packet. Applicants should consult the discipline-specific information to determine whether supplemental materials are required by the disciplines they select.

International applicants must submit the following additional forms:

- 1. Summary of Education Experiences by Years form;
- 2. Official Statement of Finances form;
- 3. If transferring from another U.S. institution, a Supplemental Information form.

All credentials submitted in support of the application for admission to the Interdisciplinary Ph.D. program become UMKC property. They will not be returned to the applicants and UMKC cannot copy them for release to a third party. Once the UMKC Admissions Office or the ISAO has received the application, application fee (if applicable), and transcripts of previous work, the application file is transmitted to the School of Graduate Studies. The School of Graduate Studies notifies each applicant by mail when the application packet has been forwarded to them. If required test scores, recommendation forms or supplementary documentation appropriate to the applicant's discipline selections are missing at that time, the applicant will be advised of the date by which all materials must be received in order to have the application reviewed by the faculty review groups in the specified disciplines for admission in the terms requested. The School of Graduate Studies transmits completed application files to the doctoral faculty review groups in each discipline the applicant has indicated on the application form.

Faculty review groups usually will not take action on an application unless all supporting documentation is on file. Applicants with files that are incomplete at the time the discipline(s) review applications will be so notified and asked whether they wish to have their applications updated for consideration for admission in a subsequent term.

An applicant can expect the review and recommendation process to take approximately 30 days from the time all supporting documentation has been received. The faculty review groups in some disciplines review all applications as a group, while in other disciplines, applications are reviewed and acted upon on a revolving basis, as received. The review and recommendation process within the disciplines varies in length depending upon the disciplines' review policies.

For questions about the contents of their admission files, or to determine whether their applications have been transmitted to the School of Graduate Studies for review, applicants may call the Admissions Office (816) 235-**1111**. International applicants may check on the status of their applications by contacting the ISAO at www.umkc.edu/isao. Once the application has been transmitted to the School of Graduate Studies, applicants may call (816) 235-**1161** for information on the status of their applications.

Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements

The following requirements pertain specifically to students pursuing Interdisciplinary Ph.D. programs. However, Interdisciplinary Ph.D. students are subject to, and also should refer to, those regulations common to all graduate students and the dissertation requirements common to all doctoral students included in the General Graduate Academic Regulations and Information section of this catalog. Students should also consult the specific requirements for the disciplines to which they have been admitted. Where discipline requirements are more stringent than the general requirements, the discipline requirements take precedence.

Change of Disciplines by Admitted Students

Once a student is admitted to Interdisciplinary Ph.D. study, any change of disciplines requires a full review process by the disciplines, similar to the initial admission review. Forms to initiate this review may be obtained from the School of Graduate Studies or downloaded from their Web site: http://www.umkc.edu/iphd.

Interim Adviser

Once an Interdisciplinary Ph.D. student is admitted to the School of Graduate Studies, the dean, upon recommendation from the student's disciplines, identifies a doctoral-faculty member from each discipline to serve as the student's interim adviser in that discipline. Students who have had minimal prior graduate study will be encouraged to explore research opportunities before choosing fields of endeavor. As the student progresses and develops focused research interests, the interim advisers are expected to assist in identifying potential research advisers among doctoral-faculty members in appropriate research areas with whom the student can discuss research plans. The interim advisers also provide academic guidance until the student selects a research adviser, has satisfied all qualifying requirements and is classified as fully admitted. The interim adviser in the student's coordinating-unit discipline reports on the student's progress to the dean of the School of Graduate Studies. If another faculty member has not been identified as the research adviser by the time the student is fully admitted and ready to formulate the plan of study, the interim adviser in the coordinating unit-discipline will automatically become the student's research adviser.

Qualifying Requirements for Full Admission

Admission to the Interdisciplinary Ph.D. program is granted on a provisional or fully admitted basis as determined by the doctoral faculty review group of the student's chosen discipline(s). Upon their acceptance as provisional Ph.D. students, applicants are notified of the specific qualifying requirements they must satisfy before they can be classified as fully admitted Ph.D. students. Provisional admission does not guarantee advancement to full admission, and full admission does not guarantee advancement to Ph.D. candidacy.

At the end of each academic year, the interim adviser reports the provisional Ph.D. student's progress toward satisfying the qualifying requirements to the dean of the School of Graduate Studies. When all qualifying requirements have been completed, the interim adviser requests that the student's classification be changed to fully admitted.

Research Adviser and Supervisory Committee

The chair and a majority of the members of a student's supervisory committee must be from disciplines certified as eligible to participate in the Ph.D. program. The student's research adviser must be a regular doctoral faculty member from the student's coordinating unit discipline.

The adviser assists the student in identifying other members of the doctoral faculty to form a supervisory committee appropriate to the student's research goals. A request for appointment of supervisory committee is included as part of the written proposal for the student's Ph.D. plan of study.

The supervisory committee shall consist of at least five members of the doctoral faculty, with a maximum of three from any one discipline and at least one from each chosen discipline. An outside reader may also be included on the supervisory committee as a non-voting member.

Students with religious studies as their coordinating unit discipline may include two adjunct doctoral faculty members from religious studies on their supervisory committees. With one exception, that no more than one member of an Interdisciplinary Ph.D. student's supervisory committee may be an adjunct doctoral faculty member, and the adjunct member may not be counted toward the mandated representation from each discipline on the committee. An adjunct doctoral faculty member can serve as co-chair but not as sole chair of an Interdisciplinary Ph.D. supervisory committee.

Annual Evaluation of Progress

During the winter semester, Interdisciplinary Ph.D. students, using forms provided by the School of Graduate Studies, must submit a summary of their accomplishments over the previous year and a projection of the progress they intend to make during the next academic year. Forms are submitted to their interim advisers or, if their supervisory committees have been formed, to the chairs of their supervisory committee. The faculty adviser or supervisory committee chair will review the student's report and meet with the student to discuss the student's progress and plans for the coming year. They will provide the student and the School of Graduate Studies with a copy of the completed evaluation form. This process should be completed by no later than the end of the winter semester each year.

Interdisciplinary Ph.D. Plan of Study

After being granted full-admission status, a student chooses a research adviser and forms a supervisory committee. In consultation with the research adviser and other members of the proposed supervisory committee, the student prepares a proposed Ph.D. plan of study, obtains all required signatures, and submits the proposed plan to the School of Graduate Studies for review and final approval by the Interdisciplinary Ph.D. Executive Committee. This submission will typically be accomplished during the first semester that the student is classified as fully admitted, and *must occur within 12 months* from the time that status has been achieved.

In addition to any coursework completed prior to admission that is being credited towards discipline-specific requirements, the written Interdisciplinary Ph.D. plan of study includes courses and other activities at UMKC that should normally be completed approximately two years from the time the Ph.D. student is fully admitted, a statement about overall plans for study and research, and a list of the proposed members of the supervisory committee.

The Interdisciplinary Ph.D. Plan of Study Guidelines

- The plan of study must include coursework from all the student's disciplines and must satisfy all of the applicable discipline-specific core requirements;
- The plan of study must include at least 30 didactic hours beyond the baccalaureate degree, exclusive of thesis or dissertation research hours, in courses taken at UMKC or courses taken at another institution and approved for transfer by the student's supervisory committee;
- Didactic coursework on the plan of study will include a minimum of 9 credit hours in a co-discipline area;
- No more than 60 percent of the total coursework taken at UMKC and listed on the plan of study, exclusive of thesis or dissertation research hours, will be in any one discipline;
- All plans of study must include a minimum of 12 hours of dissertation research (696-699) credit;
- At least two-thirds of the total courses included on the plan of study must be numbered 500 or above if taken at UMKC, or, if taken from an institution with a course-numbering system that differs from UMKC's, be courses intended primarily for graduate students;
- UMKC courses at the 100 and 200 levels, and courses with equivalent lower-division numbers taken at another institution, are not available for graduate credit and may not be applied toward the hours required for the degree nor included in the discipline percentages;
- At least 75 percent of the coursework on the plan, exclusive of dissertation credits, must be in disciplines certified as eligible to participate in the Interdisciplinary Ph.D. program;
- Students' needs will be examined on a case-by-case basis by their supervisory committees, and appropriate language or related research skill requirements will be incorporated into each student's plan of study;
- The plan of study will include a brief description of the course focus and the name of the supervising professor for any independent study courses listed;

- The plan of study will specify which courses are being used to satisfy the residency requirement;
- The plan of study will outline the comprehensive examination expectations;
- The plan of study will include a preliminary research proposal for the dissertation research, including key bibliographic references. (In the case of students with Health Psychology as their coordinating discipline, the preliminary research proposal will focus on their pre-dissertation research project.)

If modifications to discipline-specific requirements are made after the student is admitted, the student has the option of proceeding under either the requirements in place at the time he or she entered the Ph.D. program or the current requirements.

Plan of Study Approval Process

Once the supervisory committee members and student have agreed on and signed the plan of study, appropriate academic officers corresponding to the student's choice of disciplines [dean(s) or program director(s), department chair(s), division head(s), etc.], must then review and certify by signature that the courses and all other resources are currently available at UMKC and in the respective units for the student to initiate the plan of study. The student then submits the certified plan of study to the dean of the School of Graduate Studies for review and approval by the appropriate subcommittees of the Interdisciplinary Ph.D. Executive Committee.

The subcommittees of the Interdisciplinary Ph.D. Executive Committee will accept Ph.D. plan of study proposals for review only if:

- The Ph.D. coursework falls within the guidelines outlined above;
- The student will enroll at UMKC for dissertation credit under the supervision of a UMKC member of the UM doctoral faculty;
- The plan includes written assurance from the appropriate academic officers that: (1) adequate faculty, laboratories, library support and all other necessary resources are presently available at UMKC to support the proposed Ph.D. plan of study, and (2) the courses included in the plan are either presently available at UMKC and/or on the UM Video Network (this would include courses offered by other universities on the UMKC campus but offered by another regionally accredited campus) and can be taken by the student as a visiting student in a time period less than that required to satisfy the residency requirements on the other campus.

The appropriate Interdisciplinary Ph.D. executive committee subcommittees will review the certified plan of study within 60 calendar days and will either recommend to the dean of the School of Graduate Studies approval of the plan as presented or will return the plan to the student with recommendations for modification. Once the proposed plan of study and supervisory committee are approved by the Interdisciplinary Ph.D. executive committee, the dean of the School of Graduate Studies will confirm the appointment of those doctoral-faculty members who will serve as the student's supervisory committee and file the plan with the registrar. Any further modifications of the plan of study must be made in consultation with the student's supervisory committee and major modifications must be approved by the Interdisciplinary Ph.D. Executive Committee.

Interdisciplinary Ph.D. Residency Requirement

Interdisciplinary Ph.D. students must satisfy the doctoral residency requirement by satisfactory completion of at least 21 credits, exclusive of dissertation research, in no more than 18 months. When satisfying the residency requirement, all

Interdisciplinary Ph.D. students are subject to the following restrictions:

- 1. The doctoral residency requirement must be satisfied no later than the end of the semester in which the student completes his or her comprehensive examinations;
- Students must achieve a cumulative graduate grade-point average of at least 3.0 in all courses counted toward satisfying the residency requirement;
- 3. Dissertation research credits (696-699) may not be counted toward satisfying the doctoral residency requirement.

Transfer Credit

Interdisciplinary Ph.D. plans of study are tailored to the needs of individual students based on their prior academic work as evidenced by transcripts and other credentials. An approved plan of study may recognize class work from other institutions as determined by the student's supervising committee, either as qualifying courses or as relevant to a program of study.

Comprehensive Examination

To advance to degree candidacy, Interdisciplinary Ph.D. students are required to pass a comprehensive examination containing components from each discipline to which they have been admitted. The doctoral comprehensive examinations must be completed at least seven months before the date of graduation.

The following requirements must have been met before students can take the comprehensive examination(s):

- 1. Successful completion of all qualifying requirements and full admission to the School of Graduate Studies;
- 2. Appointment of a research adviser and supervisory committee;
- 3. Filing and approval of the Ph.D. plan of study and completion of essentially all coursework or other study required for the degree.

The student must be enrolled when taking the comprehensive examination. Comprehensive examinations are not administered when UMKC is not officially in session. The comprehensive examination may be written, oral or both. A student, through his or her adviser, applies to the dean of the School of Graduate Studies for an examining committee. This committee consists of members of the student's supervisory committee and others selected by the dean of the School of Graduate Studies. The examination is arranged and conducted by the examining committee. Upon completion of the examination, the student's research adviser sends a report of the results, carrying the signatures of all members of the examining committee, to the dean of the School of Graduate Studies, who then informs the student and the registrar.

A student is considered to have passed the comprehensive examination if all members, or all but one member, of the examining committee vote that the candidate passes. If failure is reported, the examining committee will either recommend termination as a Ph.D. student or suggest additional work or other remedial measures. Furthermore, a student who has failed may not take a second examination for at least 12 weeks. Failure of a second comprehensive examination shall automatically preclude candidacy at this institution.

Program Time Constraints

Refer to Minimum Academic Regulations Governing Doctoral Degree Programs (Ed.D., Ph.D., and D.M.A.) section in this catalog for a full description of the program time constraints for doctoral students.

Dissertation Research Proposal Development and Approval

The student's supervisory committee must approve the research activities associated with a dissertation. These activities must be performed under the direct and continuing supervision of the supervisory committee chair. If the proposed research involves the use of human subjects, animals or radioactive materials, the student and the research adviser must obtain prior written approval of the proposed research by the appropriate Institutional Review Board, the Animal Care and Use Committee or the Radiation Safety Committee.

For the approval process, the Ph.D. candidate must submit a brief dissertation research proposal. The dissertation proposal shall include the following:

- An abstract;
- A statement regarding the general purpose of the research;
- Background information, including a review of the relevant literature, the rationale for the research and a concise statement of the hypotheses to be investigated and/or the research questions to be answered;
- Methods;
- Appropriate protocol or application if human subjects, animals or radioactive materials are to be used in the research.

This proposal must be approved in writing by all members of the student's supervisory committee and filed with the School of Graduate Studies. It is in the best interest of the Ph.D. student to complete the approval process of the dissertation research proposal before significant progress is made on the completion of the dissertation. Any important changes in the research outlined in the proposal must be approved by the supervisory committee.

Dissertation and Completion of Degree

The dissertation is the final component of the program. For regulations pertaining to dissertation format and the process for approval, final dissertation examination and deposit of approved dissertation with Libraries, the reader is directed to Dissertation and Completion of Degree, under the Minimum Academic Regulations Governing Doctoral Degree Programs and to Thesis and Dissertation Preparation and Approval Process, included under the Minimum Academic Regulations Specific to All Graduate Degree Programs, all in the General Graduate Academic Regulations and Information section of this catalog.

Interdisciplinary Ph.D. Student Appeal Process

Students should process any petitions for waiver of policy or other academic appeals to their interim advisers or research advisers. The advisers should attach their recommendation and forward the request to the doctoral faculty review groups within the disciplines.

If the appeal does not require a policy decision, action on the appeal may be handled at the discipline level. If a policy decision is required or if, after action by the discipline, the student wishes a higher level of review of the case, the appeal or petition, complete with documentation of all reviews to that point, may be forwarded to the dean of the School of Graduate Studies for action or referral to the appropriate subcommittees of the Interdisciplinary Ph.D. Executive Committee.

Doctoral Student Association

The UMKC Doctoral Student Association was formed in 1991 to provide an opportunity for doctoral students to interact with each other and to support the students in their academic and research endeavors. The association sponsors a variety of social and academic programs throughout the year. Membership in the UMKC Doctoral Student Association is open to all duly enrolled Interdisciplinary Ph.D. students. Doctoral students in other UMKC programs are eligible to be associate members and are welcome to participate in all Doctoral Student Association activities but are not eligible to vote or serve on the executive committee.

The association is governed by an executive committee consisting of three representatives with coordinating disciplines in each of the following five areas: physical, mathematical, computer and engineering sciences; biological and chemical sciences; social and behavioral sciences; humanities and the arts; and administrative and information sciences. Any eligible doctoral student who wishes to have his or her name placed on the ballot must contact the School of Graduate Studies office by September 15 of each year. Elections are held by mail and ballots must be returned by October 15 to be counted. Terms of office are for one year and representatives may serve up to three consecutive one-year terms on the Executive Committee.

Doctoral Faculty Participation in the Interdisciplinary Ph.D. Program

On October 7, 1974, the University of Missouri Doctoral Council approved the creation of a UM doctoral faculty to identify, on all four UM campuses, qualified faculty members to direct doctoral dissertations in their disciplines. Uniform minimum standard criteria for doctoral faculty membership apply to all four campuses. In UMKC's Interdisciplinary Ph.D. program, all members of a student's supervisory committee must be regular, adjunct or emeritus members of the UM doctoral faculty, and the research adviser must be from the UMKC campus.

For purposes of the Interdisciplinary Ph.D. program, a discipline is defined as an academic unit, such as a department or division (with a chair/head) within a school, college, or academic program. To be able to participate as a discipline in the Interdisciplinary Ph.D. program, a discipline, meeting the above definition, must have at least four regular doctoral-faculty members.

Doctoral Faculty Discipline Affiliation

Doctoral faculty in each participating discipline are listed with the discipline-specific information. The code (A) next to a name indicates adjunct doctoral faculty status. The code (E) indicates emeritus status. The code (D) indicates the faculty member has regular doctoral faculty affiliations in more than one discipline.

Continuing doctoral faculty are reviewed for five-year reappointment and nominations for new appointments are considered throughout each academic year. Consequently, the list of doctoral faculty is dynamic and subject to change. Current lists are available from the School of Graduate Studies.

Interdisciplinary Ph.D. Discipline-Specific Requirements

All Interdisciplinary Ph.D. applicants and students must first meet the general requirements of the School of Graduate Studies for admission and retention in the Interdisciplinary Ph.D. program. (General Graduate Academic Regulations and Information, Application Procedure and Minimum Criteria for Admission, Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.) In addition to these general academic regulations that have been outlined in previous sections of the general catalog, disciplines may set more stringent discipline-specific requirements that take priority over the general requirements. Discipline-specific requirements for disciplines eligible to participate in the Interdisciplinary Ph.D. program are listed in alphabetical order by name of discipline. These guidelines are subject to ongoing review and revision, and the doctoral faculty reserves the right to make judicious changes in discipline-specific requirements.

The student is referred to coordinators in the disciplines for the most current information.

Art History

Discipline Coordinator

Maude Southwell Wahlman, (816) 235-**2986**, wahlmanm@umkc.edu

Doctoral Faculty Participation

Robert Cohon (A) Frances Connelly Burton Dunbar III Maude Southwell Wahlman Rochelle Ziskin

Art History is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

In addition to the general criteria for admission, applicants will be expected to have an undergraduate degree in art history, anthropology, or history, and an undergraduate minimum GPA of at least 3.0 on a 4.0 scale. An M.A. in art history is desired. Prerequisite prior coursework: Survey of World Arts. New students will be considered for admission for fall and winter semesters. Submit applications by January 31 for fall admission or September 1 for winter. In addition to the required application form, test scores, recommendations and transcripts, applicants must provide a written research plan and a research writing example. Presently only students with an interest in Non-Western arts are encouraged to apply.

Suggested Compatible Co-disciplines

Economics, education, English, history, religious studies and sociology.

Core Requirements

Art History as a Coordinating Discipline Required courses:

ART 501 Scope and Methods of Art History* ART 573 Visual Arts Administration* Seminars in African, African-American, MesoAmerican, and Native American Arts.

*Research methodology courses

Remaining credits depend upon what courses the student has taken before coming into the program. Students will generally design a total plan of study (coordinating discipline and co-discipline coursework) that includes 60 hours beyond the baccalaureate degree or 30 hours beyond the master's degree if in Art History.

Art History as a Co-discipline Required courses:

ART 501 Scope and Methods of Art History Seminars in African, African-American, MesoAmerican, or Native American Arts.

Remaining credits depend upon what courses the student has taken before coming into the program.

Requirements for Comprehensive Exams

Oral and written comprehensive exams are required, with questions based on courses taken.

Other Special Discipline-Specific Requirements

Two foreign language requirements: As determined by the Faculty Advisory Committee for each student, who will master a reading knowledge of two foreign languages, for the coordinating-unit discipline of art history and for art history as a co-discipline. The foreign language requirement should be satisfied by the time 18 hours of graduate credit have been taken toward the Interdisciplinary Ph.D. The Faculty Advisory Commitee must include two art historians. Students must meet with their Faculty Advisory Committee at least once each semester. Students must complete Annual Evaluation forms each spring.

Cell Biology and Biophysics

Discipline Coordinator

Ĵakob H. Waterborg, (816) 235-2352, waterborgj@umkc.edu

Doctoral Faculty Participation

Bibie M. Chronwall	Douglas Law
James A. Coffman (A)	Thomas M. Menees
Antony Cooper	Michael Plamann
Lawrence Dreyfus	G. Sullivan Read, Jr.
Mark T. Fisher (A)	George J. Thomas, Jr.
Edward P. Gogol	Jakob H. Waterborg
George M. Helmkamp, Jr. (A)	Lynwood R. Yarbrough (A)
Saul M. Honigberg	Marilyn Yoder
John H. Laity	Xiao-Qiang Yu

Cellular and Biophysics is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in* addition to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

No additional requirements. Due to the sequencing of coursework, new students selecting cell biology and biophysics as their coordinating unit will normally only be admitted in the fall term. In general, initial admission will be granted into an M.S. track leading to full admission to the Ph.D. program.

Qualifying Requirements for Full Admission

Minimum of 16 hours of approved graduate coursework at UMKC toward the Ph.D. program with a grade-point average of at least 3.0. International students must establish English proficiency.

Suggested Compatible Co-disciplines

Other sciences such as chemistry, molecular biology and biochemistry, pharmaceutical science, pharmacology, oral biology, or physics.

Core Program Requirements

For Students with this Discipline as their Coordinating Unit

Minimum Core

30 credit hours of courses and 15 credit hours of dissertation research for a total of 45 credit hours of post-baccalaureate credits, distributed as indicated below. The core courses should be completed by the end of the second academic year after admission to the graduate program on a full-time basis (individual arrangements will be made for part-time students).

- 30-credit-hour minimum core of courses and competencies.
 - 13 to 17 credits in cell biology and biophysics
 - (500-level or higher), including: * LSCBB 596 or 597 Advanced Experimental Cell Biology and Biophysics (2 credits) * LSCBB 612 Seminar in Cell Biology and
 - **Biophysics (2 credits)**
 - 9 to 12 credits selected from among the following 3-credit-hour courses: LSCBB 520 Eukaryotic Cell Biology, LSCBB 566 Membrane Biochemistry, LSCBB 530 Prokaryotic Molecular Biology, LSCBB 569 Structural Biology, or LSCBB 505 Molecular
 - and Cellular Neurobiology. LSCBB 690/LSMBB 690 Analytical Methods (5 credits)
 - 9 to 12 credits in related disciplines. Related disciplines are molecular biology and biochemistry, chemistry, pharmaceutical sciences, pharmacology and oral biology, although others are not precluded.

Seminar courses are part of this component of required courses, up to a maximum of three for the program, as are additional credits of Advanced Experimental Molecular or Cell Biology (a total of 4 credits in experimental laboratory courses, independent of thesis research, is required). 700-level courses may not be used to satisfy cell biology and biophysics discipline-specific course requirements.

Any of the above courses, whether part of the primary or related discipline requirements, will be credited toward the 30-credit Ph.D. course requirement if taken as part of any graduate program at UMKC and if a grade of B or better is received.

At least 15 credit hours of dissertation research in cell biology and biophysics.

In addition to basic 30-credit course core, each student's supervisory committee may require up to 9 credit hours in additional elective courses in any university-approved doctoral discipline as preparation for specific areas of research. No more than 7 credit hours of 500-level courses, or their equivalent, can be taken at institutions outside UMKC.

For Students with this Discipline as a Co-discipline Students who select this discipline as a co-discipline must take a minimum of 11 credit hours of core courses, plus seminar, including the following:

- LSMBB 561 General Biochemistry I (4 credits)
- LSMBB 562 General Biochemistry II (4 credits)
- LSCBB 612 or LSMBB 611 (1 credit)
- Sufficient other core courses to constitute the required percentage of their overall program of study. 700-level courses may not be used to satisfy cell biology discipline-specific course requirements.

Other Discipline-Specific Special Requirements

Students with this discipline as a coordinating unit must participate in the teaching program of the School of Biological Sciences.

Students with this discipline as a coordinating unit or co-discipline must participate in seminars.

Retention in Program

No more than one C grade will be permitted in basic core coursework. If a student with this discipline as the coordinating-unit discipline receives more than one C grade in a basic course, he or she will be dropped from the doctoral program. Students with this discipline as a co-discipline who receive more than one C grade will be dropped from the discipline.

A minimum grade of B in LSMBB 561 and 562 is required to remain as a doctoral student in this discipline.

For students with this discipline as their coordinating-unit discipline, no more than two C grades will be allowed in any courses and no D or F grades are permitted. A student who receives more than two C grades or a D/F grade will be recommended for termination from the doctoral program.

The doctoral faculty in cell biology and biophysics meets formally at the end of each academic year to discuss and evaluate all graduate students' progress. Each student's committee also meets with the student at least once a year. After the annual doctoral-faculty meeting, each student receives a written evaluation of his or her status and a report is placed in the student's file.

Comprehensive Examination Regulations

Full-time students with cell biology as their coordinating-unit discipline must take their comprehensive examination before the beginning of the third academic year after admission to Ph.D. study. Part-time Ph.D. students in this discipline must complete their comprehensive examination immediately after completion of the 25-hour course requirement on their Ph.D. plan of study.

Format

For students with this discipline as their coordinating-unit discipline, written and oral examinations are required.

Written Portion

The written examination, for students who have cell biology and biophysics as their primary discipline, has two components. The first component consists of a written, general comprehensive examination testing an integrated knowledge of material acquired through the courses and the seminar series in the coordinating-unit discipline and co-discipline. The second component of the written examination consists of an NIH-style grant proposal that the student will prepare. The topic of the research proposal will be determined by the student in consultation with the student's supervisory committee.

Oral Portion

The oral examination has two aspects: (1) questions covering the grant proposal prepared by the student for the written examination, and (2) other related material in the student's area of specialization, including fundamental knowledge of the student's chosen disciplines.

Chemistry

Discipline Coordinator

Ŷ. C. Jerry Jean, (816) 235-2280, jeany@umkc.edu

Doctoral Faculty Participation

K. L. Cheng (E)	Kathleen V. Kilway
John Connolly (E)	Zhonghua Peng
Jerry Dias	Thomas C. Sandreczki
James R. Durig (D)	Kenneth Schmitz
Andrew J. Holder	J. David Van Horn
Y.C. J. Jean (D)	Charles J. Wurrey

Chemistry is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Admission Requirements

Chemistry as a Coordinating Unit

Normally, only applications to full-time academic status will be considered. To qualify for full admission (Note: full admission is unrelated to full-time academic status), applicants are expected to have the equivalent of an American Chemical Society-approved bachelor's degree in chemistry, which includes coursework in general chemistry, analytical chemistry, one year of organic chemistry requiring calculus and physics as prerequisites. (For example, see UMKC's B.S. program in the Chemistry section in this catalog.) Applicants will be admitted as provisional students with a limited number of undergraduate deficiencies. They will be notified, at the time admission is offered, of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of "C" or higher.

Recommended Compatible Co-disciplines

Education, engineering, geosciences, mathematics, pharmaceutical sciences, physics and pharmacology.

Chemistry as a Co-discipline

Applicants are expected to have undergraduate coursework in general chemistry and organic chemistry. Applicants accepted as provisional students will be notified, at the time admission is offered, of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of "C" or higher.

Core Requirements

Chemistry as a Coordinating Unit

Coursework Requirements

Students are to see the principal graduate adviser, or their research adviser, for advising and signature prior to registering each semester.

Students must successfully complete a minimum of one course from Group A; one course from Group B; one additional course from Group A or B; one elective course (3 credit hours) from any course numbered 500 or above, except for those excluded below; and 1 credit hour of chemistry seminar (CHEM 611). A grade of C+ (2.3) or less in more than two chemistry courses applicable to the Ph.D. program will result in termination from Ph.D. candidacy.

Group A: CHEM 531, 532, 533, 534, 535 and 541R Group B: CHEM 521R, 522, 551R and 571R

Excluded as electives: CHEM 511, 512, 520R, 530, 540R, 590, 595, 598, 599, 611, 612, 613, 699, 899.

In addition, students must successfully complete 9 credit hours of 400-level or above coursework in their co-discipline(s). (A minimum of 3 of these credit hours must be at the 500+ level.) Students may be required to take additional courses as outlined by their plan of study.

Any of the above chemistry courses will be credited toward the Ph.D. coursework requirement if taken as part of any previous graduate program at UMKC and a grade of B-(2.7) or better is received. Also, students who have received a grade of B- (2.7) or better in graduate chemistry coursework taken as part of a degree program at another institution may have up to 6 credit hours of equivalent required coursework waived upon approval of a majority of the supervisory committee. A written request for this waiver is to be submitted and approved before submission of the student's plan of study.

Courses/Experiences Providing Instruction in Research Methodology

Expertise in research methodology will be acquired under the mentorship of the research adviser and supervisory committee.

The student's progress will be assessed annually by his/her supervisory committee and the results will be forwarded to the School of Graduate Studies.

Number of Credit Hours Required beyond Bachelor's Degree A minimum of 13 credit hours of chemistry courses (including chemistry seminar) and 24 credit hours of dissertation research plus a minimum of 9 credit hours of co-discipline courses are required. However, up to 6 credit hours of chemistry may be waived, as described above under Coursework Requirements.

Chemistry as a Co-discipline

Coursework Requirements

Students are required to complete a minimum of three courses (9 credit hours) at the 400-level or above from classes offered by the Department of Chemistry or in conjunction with other units as approved in the student's plan of study. At least 3 of these credit hours must be at the 500+ level and taken from courses offered by the Department of Chemistry. The systematic courses CHEM 520R, 530 and 540R may be used to satisfy the "400-level or above" requirement, but not the "500+ level" requirement. CHEM 590, 599 and 699 may not be used to satisfy these requirements. Students who receive a grade of C+ (2.3) or less in two or more courses used to satisfy these requirements will be disqualified from using Chemistry as their co-discipline.

Any of the above chemistry courses will be credited toward the Ph.D. coursework requirement if taken as part of any previous graduate program at UMKC and if a grade of B-(2.7) or better is received. Transfer credit from another institution cannot be applied to Chemistry's co-discipline requirement.

Special Requirements

Chemistry as a Coordinating Unit

Placement Examinations

Incoming students take placement examinations in analytical, inorganic, organic and physical chemistry. Placement examinations are typically administered the week preceding the first week of classes of the fall and winter semesters. Students scoring below the 50th percentile in the organic and/or physical chemistry exams are required to enroll in CHEM 520R and/or CHEM 530, respectively. Enrollment in other graduate organic or physical chemistry courses is not permitted until CHEM 520R and/or CHEM 530, respectively, is(are) successfully completed. Two grades of C+ (2.3) or lower, or one grade of less than C- (1.7) in CHEM 520R/CHEM 530 will result in termination from the degree program. These courses may not be counted toward the coursework requirements above.

Research Adviser

Full-time students are to select a research adviser from the doctoral faculty of the Department of Chemistry and a supervisory committee by the end of their first regular (e.g. fall or winter) semester on campus.

Seminar

Students are required to attend and participate in all regularly scheduled and special Chemistry Department seminars and colloquia. Students are required to present a one-hour chemistry seminar (CHEM 611) during their second year following full admission to the Ph.D. program, based on their dissertation research project. This seminar will include a thorough review of the literature pertinent to their project and a description of the objectives, the proposed methodology and the significance of this research. An abstract is to be posted and distributed one week prior to the presentation date.

Time Constraints and Financial Support

Students must complete all requirements for their degree within seven years from the date of full admission to the Ph.D. program. Under compelling circumstances and on the written recommendation of a majority of the supervisory committee, a single extension for up to one year may be requested for approval by the dean of the School of Graduate Studies. Full-time (as defined in the current UMKC catalog) Ph.D. students may receive financial support (in the form of fellowships or teaching assistantships) from the Department of Chemistry for a maximum of five years. Students from countries not having English as their first language, and who are to be supported as Graduate Teaching Assistants, are to take the SPEAK test before the end of the first week of their first semester on campus. They are to enroll in English 100E their first semester on campus if necessary.

Dissertation

Students must complete a minimum of 24 credit hours of dissertation research (CHEM 699). All supervisory committee members are to receive a final draft of the dissertation for approval of form and content at least two weeks before submission to the dean of the School of Graduate Studies for certification. Candidates should submit preliminary drafts well in advance of this deadline. After the dissertation is certified for acceptance, the student must present an oral defense of his/her research in the form of a dissertation seminar. The supervisory committee will make a final determination of the acceptability of the dissertation immediately following this presentation. Only minor changes may be made to the dissertation at this point.

Expectations for Interdisciplinary Work

Chemistry as a Coordinating Unit

Students develop and pursue a plan of study that includes coursework from the coordinating unit and co-discipline(s). The interdisciplinary nature of the student's program is emphasized in the comprehensive examination, which includes material from all disciplines in the plan of study.

Chemistry as a Co-discipline

The Department of Chemistry will cooperate with the student's coordinating unit in assessing the interdisciplinary nature of the student's progress.

Comprehensive Examination Guidelines

Chemistry as Coordinating Unit

A written comprehensive examination will be prepared and administered by the examination committee (consisting of the student's supervisory committee and others selected by the dean of the School of Graduate Studies) before completion of the student's third year following full admission to the Ph.D. program. This examination will be based on the student's coursework and on general knowledge in all areas of his/her specialization. All efforts will be made to emphasize the multidisciplinary nature of the student's program in this examination. If the student fails the written portion of the comprehensive examination, he/she may petition the examination committee to allow for a single opportunity to retake it. This second examination must be completed no earlier than twelve weeks and no later than six months from the date of completion of the first examination.

After successful completion of the written portion of the comprehensive examination, an independent research proposal will be prepared describing a research project not related to the student's current research. The topic is to be approved by the examination committee. An abstract is to be posted and distributed, and a written copy of this proposal (in standard NSF or NIH format) given to all members of the examination committee at least one week prior to presentation in a proposal seminar. This seminar must be presented to all members of the examination committee within seven weeks of the completion date of the written portion of the comprehensive examination. The research proposal and proposal seminar are part of the comprehensive examination.

Chemistry as a Co-discipline

The comprehensive examination will be determined by the student's coordinating unit in cooperation with the co-discipline(s).

Computer Networking

Discipline Coordinator

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Doctoral Faculty Participation

Cory Beard	Xiaojun Shen
Lein Harn (D)	Jerry Stach (D)
Vijay Kumar (D)	Appie van de Liefvoort (D)
Deepankar Medhi	

Computer Networking is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

A student who meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program. A student who does not meet some of the requirements but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of student's interest, the quality of previous work, etc. A student not qualifying for admission to the Ph.D. program may be considered for admission to the M.S. in computer science program. Requirements for admission are the same whether the applicant is requesting computer science (networking) as the coordinating discipline or co-discipline.

Academic Preparation

The applicant must have a bachelor's degree and/or a master's degree in computer science, computer engineering, electronics, communications engineering, or any other field requiring substantial training in at least one of the above fields and in mathematics with a cumulative GPA of 3.5 or better, as well as in the major field; and a GPA of 3.5 or better in all post-baccalaureate or post-master's work.

Aptitude for Advanced Work

The student must demonstrate an aptitude for advanced-level work through national or international standardized examinations such as the GRE. The expected performance level is the 85th percentile in the quantitative portion of the GRE examination.

Proficiency in English

The student must demonstrate his or her proficiency in oral and written communication in English through national or international standardized English examinations such as TOEFL, verbal portion of the GRE, etc. The expected proficiency level is the 50th percentile in the verbal portion of the GRE or a TOEFL score of 570 (270 on computer-based test). UMKC students may also satisfy this requirement by obtaining an "English Proficiency Certification" from the English Department. [**Note**: As University policy, all international students are tested for proficiency in English upon arrival on campus, irrespective of their scores in TOEFL or verbal portion of GRE or any other test. A student's adviser may also require the student to take the above test, regardless of the student's native language. As a result of this test, students may be required to improve their oral and written communication in English before enrollment in the courses of the chosen disciplines.]

Recommendations

The student must provide at least two, but preferably three, recommendation letters from the professors from his or her previous institution(s). If the applicant has been out of school for several years, recommendation letters from his or her supervisors (technical) will be acceptable. At least a recommendation from UMKC Computer Science and Electrical Engineering (CSEE) Division faculty must be provided if the student has taken courses from or worked with CSEE faculty.

Statement of Goals and Objectives

The applicant must provide a 250- to 500-word essay on his or her goals and objectives in pursuing the Ph.D. in the chosen fields.

Admission at an Advanced Level

An applicant who has already completed significant graduate coursework (15 or more semester hours of post-master's degree work or 30 or more hours of post-bachelor's degree work) toward a Ph.D. at another institution must provide reasons for changing institutions. The applicant also must provide a letter of endorsement from an SCE faculty indicating willingness to be the student's research adviser.

Alternate Admission Criteria

An applicant not meeting the minimum admission requirements or not having sufficient academic preparation (stated below under "prerequisite knowledge") for advanced work in the chosen discipline(s) may be considered for provisional admission by the CSEE Division's Ph.D. committee, if the committee sees high potential for advanced work from the rest of the applicant's credentials. Evidence of high potential may include pertinent work experience, published papers or extremely high achievement in another criterion area. However, the required GPA (or GPAs) must be at least 3.0, and the coursework deficiencies in the applicant's chosen SCE discipline must not be more than 18 semester hours.

Qualifying Requirements for Full Admission

Prerequisite Knowledge

A Ph.D. student selecting computer networking as a discipline is expected to have the level of preparation represented by the following courses before attempting advanced study in the discipline:

- Computer Science: CS 352, CS 431, CS 441, CS 481, CS 394R.
- Mathematics: MATH 250.

Length of Time to Complete Qualifying Requirements: When a student is admitted provisionally, the conditions and the maximum period for conditions to be satisfied for the change of status to regular admission will be specified by the SCE Ph.D. committee and confirmed by the UMKC Interdisciplinary Ph.D. Executive Committee at the time of provisional admission.

Suggested Compatible Co-disciplines

Software architecture, telecommunications networking, mathematics, physics, chemistry and engineering.

Core Program Requirements

The amount of work required for the Ph.D. depends on the student's level of preparation. For example, a student entering the Ph.D. program after obtaining a bachelor's degree may expect to do significantly more work compared to the student entering after receiving a master's degree.

Qualifying and Comprehensive Examination Guidelines

The Qualifying Exam is administered by the CSEE Division's Ph.D. committee. The exam is a writtem exam and the questions are from fundamental courses (up to 300 level) and 400-level discipline-specific courses.

The Comprehensive Exam is administered by the doctoral committee of the candidate. The exam is a writtem exam and the questions are from both coordinating unit and the co-discipline for each candidate.

The candidates should contact the CSEE Division office and the chair of their doctoral committee for more information.

Economics

Discipline Coordinator

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Doctoral Faculty Participation

Stephanie Bell	Fredric S. Lee
W. Robert Brazelton (E)	James I. Sturgeon
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Economics is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

In addition to the general criteria for admission, applicants will be expected to have a master's degree in economics or its equivalent. The deadline for receipt of completed applications and supporting documentation is February 15 for the fall semester and October 30 for the winter semester.

Alternate Admission Criteria

Applicants who do not fit the above criteria may petition the economics doctoral committee with evidence of scholarly publication, research and recommendations, but the decision rests with the committee.

Qualifying Requirements for Full Admission

At the time admission is offered, provisional students will be notified of any course deficiencies or qualifying requirements to be met for full admission. The faculty will make a decision with regard to full admission based upon the student's performance in meeting the qualifying requirements.

Suggested Compatible Co-disciplines

History, public affairs and administration, education, urban leadership and policy studies in education, psychology, political science, sociology and the Social Science Consortium.

Core Program Requirements

For Students with this Discipline as Their Coordinating Unit Students with economics as the coordinating-unit discipline will take a minimum of 36 hours of coursework other than dissertation beyond the master's degree or its equivalent. These courses will be taken in economics and at least one additional field such as sociology, history, business or public administration, education, psychology, mathematics, political science, geosciences, computer science or others, provided that such fields participate in the doctoral program.

- Economics core courses and prerequisites or the equivalents (21 credit hours minimum):
 - Colloquium in Advanced Macro-Economics, 601 (Prerequisite, ECON 501);
 - Colloquium in Advanced Micro-Economics, 602 (Prerequisite, ECON 502);
 - Colloquium in Econometrics, 625 (Prerequisite, ECON 521, 525);
 - Colloquium in Political Economy, 688;
 - 9 hours in 500-level or above electives in economics or related fields other than the above stated prerequisites; subject to the permission of the graduate adviser.
- Coursework in an outside field or fields, depending upon the requirements of co-discipline regulations;
- Dissertation and oral examination, 12 hours.

For Students with this Discipline as a Co-discipline Those students taking economics as a co-discipline will take a minimum of 12 hours in economics, at the graduate level, including:

- ECON 501 Advanced Macro-Economic Analysis (prerequisite, ECON 301 or equivalent)
- ECON 502 Advanced Macro-Economic Analysis (prerequisite, ECON 302 or equivalent)

Other Discipline-Specific Special Requirements

Students with economics as their coordinating-unit discipline must be able to demonstrate skills in computer analysis.

Comprehensive Examination Guidelines

Coordinating-discipline students are required to pass a qualifying examination in economics theory–micro, macro and political economy, and in quantitative methods. Students taking field concentrations must pass a comprehensive examination in those fields.

Co-discipline students must pass a comprehensive examination in two of the following areas: institutional economic theory, macroeconomics, microeconomics, quantitative methods.

Education

Discipline Coordinator

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Doctoral Faculty Participation

Susan Adler	Tamera Burton Murdock
Rita Barger	Arthur Louis Odom
Linda Garavalia	Dianne Smith (D)
Jennifer Jay	Omiunota Ukpokodu
Malcolm E. Linville, Jr.	Sue Vartuli

Education is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Applicants who designate education as their coordinating unit will be expected to have a grade-point average of at least 2.75 (on a 4.0 scale), covering all college work taken prior to the bachelor's degree, or a GPA of at least 3.5, covering all post-baccalaureate work completed to date. If the discipline is selected as the coordinating unit and the dissertation research will have a primary orientation in education, the student must obtain the agreement of a member of the doctoral faculty in education to serve as research adviser before the student can be admitted.

The applicant must provide the following supplementary documentation:

- 1. Written recommendations from appropriate professors and practitioners in the field (selected by student);
- 2. An autobiographical sketch (a brief resume of academic and professional goals and the applicant's personal, academic and career history as it relates to stated objectives);
- 3. Evidence of graduate-level writing ability provided by writing samples or the successful completion of an essay examination.

In addition, an applicant, the applicant's adviser, or any member of the division may request that the applicant meet with, and be interviewed by, the division faculty.

Alternate Admission Criteria

An applicant whose admissions profile does not satisfy the Ph.D. general criteria but whose aggregate GRE score on all three sections is at least 1300 may be considered for recommendation for admission with education as either the coordinating-unit discipline or as a co-discipline. In addition to written recommendations, an autobiographical sketch, writing samples and written agreement from an education doctoral faculty member to serve on the applicant's supervisory committee, an applicant wishing to be considered under alternate admission criteria must submit a letter stating why he or she feels his or her credentials are equal to the 1500 aggregate GRE criterion.

Provisional Admission Criteria

Applicants with aggregate GRE scores below 1300 may be considered for admission on a provisional basis. Provisional acceptance criteria for doctoral study with education as the coordinating-unit discipline include: a) a GPA that meets the general guidelines for the program, b) a strong endorsement of a doctoral faculty member in education who can assure the faculty that at least one other education doctoral faculty member will serve on the student's supervisory committee, c) submission of a writing sample of choice, d) letters of reference, and e) a persuasive letter from the student. Doctoral faculty in education are limited to no more than two provisional doctoral students at a time.

Provisional acceptance criteria for doctoral study with education as the co-discipline include: a) a GPA that meets the general guidelines for the program, b) a separate letter of justification from a doctoral faculty member in education, and c) a writing sample of choice. A suggested limitation is one provisional student with education as a co-discipline per doctoral faculty member.

Additionally, all students so accepted, whether with education as the coordinating-unit discipline or a co-discipline, must submit a plan of study to include 12 semester hours of coursework. The plan must be approved by the student's coordinating-unit discipline faculty adviser and, if education is the co-discipline, the proposed co-disciplinary study adviser. Students would be expected to maintain a B or better GPA, at the 500- or 600-level courses. These courses need to be taken within a two-year time frame to maintain the provisional status. Once these, or other possible stated provisions, have been met, the provisional student automatically will be reclassified to doctoral student status in the discipline.

Qualifying Requirements for Full Admission

All students must have completed 12 hours of 500- or 600-level courses at UMKC with grades of B or better in each course to be eligible for full-admission status.

Students admitted under alternate or provisional criteria will be notified upon acceptance of any coursework deficiencies they must satisfy or other preparation they must undertake prior to full admission.

Suggested Compatible Co-disciplines

Urban leadership and policy studies in education, music education, chemistry, psychology, history, mathematics, physics, and public affairs and administration.

Core Program Requirements

Ph.D. study in education prepares students with diverse academic and professional backgrounds to meet equally diverse career and scholarly goals. Moreover, rather than being a homogeneous field with a relatively uniform approach to Ph.D. study, education encompasses several separate specialized areas, each with its own requirements and expectations regarding doctoral work. Hence, students accepted for the Interdisciplinary Ph.D. program with education as their co-discipline may have backgrounds in one of the educational fields represented in the School of Education, in one of the disciplines represented in the College of Arts and Sciences, or in a professional field such as criminology, computer science or law. Students accepted with education as their coordinating-unit discipline would typically have prior academic training and experience in education. Advisers would tend to be specialists in reading education, physical education, special education, educational psychology, mathematics education, science education, or curriculum and instruction.

The doctoral student in education may be preparing for teaching and research in higher education, for a curricular or supervisory position in a public school district, or for work in a government agency, private foundation, or an educational training role in business and industry. Consequently, a single set of minimum standards cannot possibly fit all Ph.D. programs for which education is the coordinating or co-disciplinary unit. Instead, sensitivity to individual student needs and goals, as well as regard for the different approaches to doctoral study represented in the several fields within education, require flexibility and diversity in program planning.

Within the context described, a minimum of 24 hours in education is required of students with education as their coordinating-unit discipline and a minimum of 12-15 hours in education is expected of students selecting education as their co-discipline. In no case will a program be drawn up or approved that contains only coursework previously completed. Additional requirements may be set by the student's doctoral supervisory committee on the basis of the individual's program goals, previous academic preparation and relevant prior experiences.

Comprehensive Examination Guidelines

The student may obtain discipline-specific information on comprehensive examination guidelines from his or her research adviser.

Engineering

Discipline Coordinator Anil Misra, (816) 235-1285, misraa@umkc.edu

Doctoral Faculty Participation

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Ouinton Bowles	Anil Misra
Deb Chatterjee	Deborah O'Bannon
Ghulam Chaudhry	Jerry R. Richardson

Engineering is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

A student who satisfies the general requirements for admission and also meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program with engineering as a discipline. A student who does not meet some of the requirements but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of the student's interest, the quality of previous work, etc. Requirements for admission are the same whether the applicant is requesting engineering as the coordinating-unit discipline or co-discipline.

- 1. The applicant must have a bachelor's degree or a master's degree in civil, electrical or mechanical engineering, or related disciplines with a grade-point average of at least 3.0 in the last 60 hours of undergraduate engineering coursework. In addition, a GPA of 3.5 or better in all post-baccalaureate coursework is required. Pre-program requirements may be specified in case the bachelor's degree is in a discipline different than that to which the candidate is applying.
- 2. The student must demonstrate an aptitude for advanced-level work by obtaining a cumulative GRE score of at least 1600 (verbal + quantitative + analytical) and by ranking at least in the 85th percentile on the quantitative portion of the examination.
- 3. TOEFL SCORES are required for international students without prior U.S. degrees. There are two TOEFL tests. One is paper-based; one is computer-based. A minimum score of 550 on paper-based test (which corresponds to 213 on computer-based test) is required.
- 4. The student must provide at least three recommendation letters from professors at previous institutions or mentors at work.
- 5. The applicant must provide a 500- to 750-word essay on his or her goals and objectives in pursuing the Ph.D. in the chosen fields.
- 6. Provisional admission may be granted if the minimum GPA and GRE requirements are not met, but other indicators promise the student's success in the program. To be fully admitted to the Interdisciplinary Ph.D. program, the provisionally admitted student must obtain a grade of B or better in the first 9 hours of coursework and submit a satisfactory GRE score within their first year of the program.

Suggested Compatible Co-disciplines

Possible co-disciplines include but are not restricted to chemistry, computer networking, geosciences, history, mathematics, molecular biology and biochemistry, oral biology, physics, software architecture and telecommunications networking.

Core Program Requirements

Engineering as Coordinating Discipline A minimum of 60 credit hours of approved graduate coursework (300-level or higher) beyond the baccalaureate, including dissertation research hours (CE699, EE699 or ME699), are required. Of these, at least two-thirds must be at 500/600-level. The graduate coursework may include courses taken at UMKC or other institutions and approved for transfer by the student's supervisory committee. A minimum of 12 credit hours of dissertation research (CE699, EE699 or ME699) is required.

Example Minimum Requirements Beyond Master of Science Degree

Coordinating discipline (Engineering)	9
Co-discipline (e.g. Mathematics or Physics)	12
Dissertation research	12
Total beyond M.S. degree (typically 30 hours)	33

Engineering as Co-discipline

A student electing engineering as co-discipline will be required to complete 12 credit hours in engineering graduate courses, of which at least six hours must be at the 500/600-level.

Comprehensive Examination Guidelines

To advance to degree candidacy, an Interdisciplinary Ph.D. student is required to pass a comprehensive examination administered by the student's research adviser and supervisory committee. This comprehensive exam will consist of two parts. Part One will be a written exam over the student's Ph.D. coursework. Part Two will be an oral defense of the student's dissertation research proposal.

English

Discipline Coordinator

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Doctoral Faculty Participation

Kimberly Banks	Daniel Mahala
Virginia Blanton	Daniella Mallinick
Joan Dean	Jennifer Phegley
Stephen Dilks	Michael Pritchett
Moira Ferguson	Thomas Stroik
Jane Greer	George Williams
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English is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

For new students selecting English as a discipline, admission will normally be for the fall term. Application dossiers must be complete by January 15. The English Department doctoral committee will review applications for admission to the Ph.D. program once a year by the last working day of January.

Applicants who select English as their coordinating-unit discipline will be expected to have the M.A. in English or equivalent coursework as determined by the English Department doctoral committee. Applicants who select English as a co-discipline should have completed a master's degree or equivalent coursework. In most cases, students will be expected to have completed, with a grade of B or better, 12 hours of English courses at the 300- or 400-level (or appropriate equivalents) that are approved by the English Department doctoral committee.

An applicant who plans to pursue a degree with English as a discipline is required to provide the English Department doctoral committee with the names of three individuals who are academically or professionally qualified to assess the applicant's ability to pursue doctoral work. References submitted to the School of Graduate Studies for admission to doctoral studies may be judged by the English Department doctoral committee as sufficient evaluation, but the department reserves the right to request further information.

Applicants also are required to submit samples of written work to the English Department doctoral committee. The applicant's narrative statement, submitted with the application form, should provide a well-focused justification of the proposed course of study that is compatible with the department's resources. Applicants should consult with the English Department principal doctoral adviser for advice on the preparation of the narrative. Applicants may also seek advice on the narrative from doctoral committee members with special expertise in the applicant's chosen fields of study.

Applications will be evaluated by a committee of the doctoral faculty in the English Department; the committee will recommend to the department chair and dean of the School of Graduate Studies whether the applicant should be admitted. These English-specific requirements apply to all applicants intending to have English as coordinating-unit discipline or co-discipline.

Students who expect to write a dissertation that draws primarily on research in English must apply for English as their coordinating-unit discipline.

In cases where an applicant has not yet met the foreign language requirement or GRE scores are still pending, provisional admission may be recommended.

Alternate Admission Criteria

The department's required GRE score is independent of, and takes precedence over, the School of Graduate Studies' minimum of 1500 points.

Qualifying Requirements for Full Admission

Requirements for full admission are based on level of participation in the discipline. Full admission to English as coordinating discipline is dependent on the applicant's meeting three requirements: appropriate coursework, satisfactory GRE scores, and relevant foreign language skills. Full admission to English as a co-discipline is dependent on the applicant meeting two requirements: appropriate coursework and relevant foreign language skills.

English as Coordinating-unit Discipline

GRE scores: Either (1) a general verbal score in the 60th percentile or better; or (2) a score in the 60th percentile or better in the English subject examination.

Relevant Foreign Language Skills: Applicants must demonstrate facility in a foreign language relevant to study in English. The language requirement will ordinarily be met by two years of satisfactory college-level language study. Students may be required to demonstrate additional language skills to undertake or complete their dissertations.

English as a Co-discipline

GRE scores: A general verbal score in the 60th percentile or better.

Foreign Language Skills: Demonstrate foreign language competence in the same manner as students with English as the coordinating-unit discipline.

Suggested Compatible Co-disciplines

Education, religious studies, history, psychology and sociology.

Core Program Requirements

All students who list English as a discipline, whether as coordinating-unit discipline or co-discipline, are required to take English 500, Introduction to Graduate Study in English, or its equivalent.

Students admitted with English as the coordinating-unit discipline are subject to the following requirements:

- Only English courses numbered 400 or above will be accepted for the Ph.D. degree. Courses taken in other disciplines may be taken at the 300-level or above;
- No grade below B in any course will be accepted to apply toward the Ph.D. degree;
- In most cases, no more than one-third of coursework in English, exclusive of credit for dissertation work, that is classified as independent study will be accepted for the Ph.D. degree;
- Students will be expected to complete the majority of their coursework at UMKC;
- In certain cases, exceptions to these requirements may be allowed.

Other Discipline-Specific Special Requirements

For foreign language requirement, see "Qualifying Requirements for Full Admission" for this discipline.

Dissertation

Dissertations written where English is the dominant component must be submitted through the student's supervisory committee to an appropriately qualified reader at another university, selected by the committee, in sufficient time for that expert to return a written evaluation of the dissertation for consideration by the supervisory committee before the dissertation defense. The dissertation should, in most cases, be written using *The MLA Style Manual*.

Comprehensive Examination Guidelines

Before advancing to Ph.D. candidacy, students whose coordinating discipline is English will take three examinations: a written general examination, an oral interdisciplinary subject examination, and a co-disciplinary examination. All three examinations should be taken within a one-month period. The examinations must be taken within a year of completing coursework.

The general examination is a 6-hour exam, written in two 3-hour sittings. This exam is administered by the English faculty on the Supervisory Committee, led by the Chair of the committee. The subject examination is a 2-hour oral interdisciplinary exam that is administered by the entire Supervisory Committee, led by the Chair of the committee. The co-disciplinary exam will be administered by the co-disciplinary faculty on the Supervisory Committee.

Exam areas shall be designated at the time of the submission of the program of study. These may be changed only with the consent of the entire Supervisory Committee. Exam questions shall not be distributed in advance for either the general or subject examination. At least six months before the student plans to take his or her exams, the student shall notify committee memers of his or her choice of areas/periods and submit a tentative reading list of primary and critical works for all examinations. The Supervisory Committee shall then meet to approve the areas and review the proposed reading list and address any oversights or imbalances.

The general examination consists of two parts, each covered in a 3-hour sitting and each receiving equal weight. The examination is designed to test the breadth of the candidate's knowledge in the fields in question. The student will choose two areas in which he or she wishes to be examined, whether periods of literary history (e.g., British 19th century, American literature from 1865, British and American literature since 1945) or other areas of expertise (e.g., linguistics, history of the language, rhetoric, genre studies, literacy studies). The reading list, which is subject to the approval of the Supervisory Committee, should consist of works from the selected periods or areas of expertise which have achieved broad recognition or influence.

For the oral interdisciplinary subject examination, the student will prepare in advance, in the period specified above, a tentative reading list on the subject of the proposed dissertation for approval or revision by the Supervisory Committee. The subject examination will deal with current scholarship and methodology as well as with primary sources and other standard works in the field. The exam will be administered in a single 2-hour sitting.

For students whose co-discipline is English, a single 3-hour written examination will be designed in consultation with the coordinating discipline.

Geosciences

Discipline Coordinator

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Doctoral Faculty Participation

Jimmy Adegoke	Syed E. Hasan
Raymond M. Coveney, Jr.	Daniel P. Hopkins
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Caroline P. Davies	Jejung Lee
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James Durig (D)	Tina Niemi
Richard J. Gentile (E)	

Geosciences is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Specific admission requirements defined by the faculty of the Department of Geosciences follow the guidelines established by the School of Graduate Studies. Typically, a student would be expected to hold an undergraduate or master's degree in geology, geography or a closely related field. Opportunities within the department range from the physical sciences to the humanities. Because of the wide range of faculty expertise, and in keeping with the general spirit of the entire interdisciplinary program, the faculty of the Department of Geosciences has deliberately chosen to establish broad guidelines for admission of Interdisciplinary Ph.D. students. All prospective graduate students must attain a GPA of 3.0 or above, on a 4.0 grading scale, in all university work prior to admission. Three letters of recommendation from professors as well as a proposal from the prospective student detailing goals and expectations are needed for an evaluation of the application.

Non-native English-speaking applicants seeking geosciences as a coordinating discipline must demonstrate proficiency in English. This requirement can be satisfied by obtaining English proficiency certification from the UMKC English Department.

Suggested Compatible Co-disciplines

Faculty members in the Department of Geosciences conduct research in applied geophysics, engineering and environmental

geology, stratigraphy, geochemistry, GIS, mineral deposits, neotectonics, geoarcheology, geomorphology, Quaternary environments, cultural and historical geography (Europe, Latin America, the Caribbean and West Africa), and historical cartography. Suitable co-disciplines for the Interdisciplinary Ph.D. program are practically unlimited (see www.umkc.edu/geosciences for possibilities). Consultation with the principal graduate advisers for geology and geography would be a good way for the student to explore the possibilities. Previous and existing geology students have designated co-disciplines of chemistry, physics, and education. Previous geography Ph.D. students have designated education as a co-discipline. Other excellent possibilities would include political science, economics, history and sociology.

Core Program Requirements

Specific core program requirements follow the guidelines established by the School of Graduate Studies and are otherwise defined by the student's supervisory committee in consultation with each individual student.

Other Discipline-Specific Special Requirements

While there is no set minimum number of hours for all students, at least 50 percent of the course credit hours for students who select geosciences as their coordinating unit must be taken in the Department of Geosciences. Students who have selected geosciences as a coordinating unit or a co-discipline are expected to take no less then three courses from the Department of Geosciences as determined by their supervisory committee. Other special requirements are defined by the student's supervisory committee in individual consultation with each student. All geosciences students (coordinating or co-discipline) are expected to successfully complete a qualifying examination in their subject area, devised by departmental faculty, by the end of their first two semesters of residency. The department requires the student to demonstrate reading competency in an approved foreign language, by one of the following means:

- Completing 6 hours of coursework in the Department of Foreign Languages and Literatures at the 300-level or above;
- Passing an examination by a qualifying examiner approved by the student's supervisory committee.

Comprehensive Examination Guidelines

Comprehensive examinations of all Ph.D. students, who select the Department of Geosciences as the coordinating unit, will contain both written and oral components and may include questions from each of the co-disciplines and from related fields as determined by the student's examining committee. The committee consists of the student's supervisory committee and others who may be appointed by the dean of the School of Graduate Studies.

Interdisciplinary Work

The faculty of the Department of Geosciences are committed to an interdisciplinary approach and expect that all Ph.D. students, whether enrolled in the coordinating or the co-disciplinary category, will complete courses and conduct research with this principle in mind.

Health Psychology

Discipline Coordinator

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Doctoral Faculty Participation

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Kathleen Goggin (D)	Marne Sherman (D)
C. Keith Haddock (D)	Lisa Terre (D)

Health Psychology is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

The discipline of health psychology is a non-clinical program. Students who wish to pursue a clinical program Ph.D. in health psychology will need to see the requirements for the Doctor of Philosophy: Clinical Program (Health Emphasis).

The non-clinical program can be tailored to the needs of the student with the proviso that they be compatible with the interests of the supervisor and the course offerings available in the health psychology curriculum. Many creative career options might be generated in a non-clinical program; for example, in academe, teaching and doing research. Students in this program could combine health psychology with any number of other disciplines. Some examples: a student interested in health administration might combine public affairs and administration with health psychology, a student interested in spirituality and health might combine religious studies with the health psychology discipline, a student who wants to develop a career in sports with a psychological slant might combine the education discipline (physical education focus) with health psychology, or a student interested in an academic career focused on research and teaching could combine psychology and health psychology. Many other interesting combinations are available, and since new disciplines are added to the Interdisciplinary Ph.D. program from time to time, available options are expanding.

Because identification as a psychologist is regulated by statute, completion of an Interdisciplinary Ph.D. with health psychology as one of its components and a non-psychological discipline as the other is not intended to enable students to be license-eligible or use the title psychologist. Laws pertaining to licensure and accreditation vary from state to state. (For details on the Missouri statutes relevant to psychology, inquiries should be made to the State Committee of Psychologists in Jefferson City, Mo.)

Individualized interdisciplinary programs, such as the health psychology program, are for those who want a degree that transcends and synthesizes the foundational disciplines. These programs are in no way less demanding than other Ph.D. programs; their uniqueness lies in the creation of tracks specifically tailored to individualized combinations of student and faculty talents and interests. This implies that it is very important for applicants to identify faculty with interests and background that match their own.

Discipline-Specific Admission Requirements

Admission is considered for fall and winter semesters only. Application deadline is March 1 for fall and October 15 for winter.

Health Psychology as a Coordinating Unit

Health psychology is appropriate as a coordinating unit for qualified students who have a strong background in

psychology or related disciplines, and whose interests match those of our health psychology faculty. Students who want to be admitted with health psychology as their coordinating-unit discipline must have shared interests with faculty members in the health psychology discipline. For that reason, it is wise for applicants to acquaint themselves with the interests and capabilities of health psychology faculty to make certain they share a serious interest with at least one potential mentor, and that the health psychology curriculum is a good match for what they hope to learn.

- 1. Typically, applicants should have a B.S. or B.A. in psychology but a degree in a related discipline, such as counseling, social work, special education, or a health discipline such as pre-med or nursing may also fulfill this requirement. Students whose background in psychology provides insufficient preparation for advanced psychology classes may be required to take preparatory courses prior to full admission into the Ph.D. program. Student grades in these preparatory courses must be high enough to permit the supervisor and the admissions committee to conclude that the student is capable of participating in Ph.D.-level courses alongside students in other Ph.D. programs. (This implies that the student has a strong preponderance of A's in those background courses. See section on Qualifying Requirements for Full Admission.) Admission to the program is competitive and we seek to admit students with a broad history of excellence.
- 2. The Health Psychology discipline accepts the School of Graduate Studies' criteria for the Graduate Record Examination. Students who fall short of these criteria can present alternative criteria that indicate the capacity to do quality doctoral-level work in health psychology. These alternative criteria may be accepted, at the discretion of the Health Psychology Admissions Committee and the School of Graduate Studies.
- 3. Admission to the health psychology discipline is quite competitive, and applicants should have approximately a 3.5 grade-point average or other evidence of ability to perform well in such a program. Students who meet the other admission criteria and who have an interest in research compatible with those of faculty will be viewed favorably as applicants.
- 4. When submitting their application to the School of Graduate studies, applicants must include the following information in addition to the materials required by the Graduate School:
 - (a) An up-to-date resume or vitae, including a description of past experiences and accomplishments relevant to health psychology (e.g. research or other work in health settings or evidence of skills transferable to health psychology);
 - (b) A detailed statement of career goals, relating them to available curriculum in health psychology and to specific faculty interests and skills;
 - (c) A Supplemental Application form for health psychology discipline applicants (available on request from the psychology department or from the School of Graduate Studies).

Health Psychology as a Co-discipline

Health Psychology is appropriate as a co-discipline for certain students whose Ph.D. programs in their coordinating discipline would be enhanced by a strong, graduate-level education in Health Psychology.

To be admitted to the Interdisciplinary Ph.D. program with health psychology as a co-discipline, students must provide convincing evidence they have a clear aptitude for graduate study in the discipline, and that such study provides a useful, coherent addition to the work they will do in their coordinating discipline. In addition, they must show their goals are compatible with the available courses in health psychology and with topics of health psychology faculty emphasis and interest. Admission requirements for health psychology as a coordinating discipline. In most instances, students who do not have a strong background in health psychology will be required to take preparatory courses that provide background in core content of the discipline (e.g. Psychology 331 and other courses to be determined in consultation with the supervisory committee), and in methodology (e.g. Psychology 302). Students must do well in these courses prior to full admission into the discipline of health psychology (i.e. earn mostly A's).

Alternate Admission Criteria

On the recommendation of the sponsor and at the discretion of the Admissions Committee, students who fall short of the GRE criteria can present alternative criteria that indicate the capacity to do quality doctoral-level work in health psychology.

Qualifying Requirements for Full Admission

Students being admitted provisionally may, at the time the offer is made, be notified of course deficiencies or other qualifying requirements to be met for full admission.

Suggested Compatible Co-Disciplines

Education, oral biology, pharmaceutical science, pharmacology, psychology, public affairs and administration, religious studies, social science consortium, sociology, and urban leadership and policy studies in education.

Core Program Requirements

The following must be included in all Plans of Study with Health Psychology as a discipline:

- Coursework in research methodology and data analysis. This may be obtained through the Department of Psychology but the requirement can also be filled through courses in methodology and research from other disciplines (in the latter case, approval of the Supervisory Committee is required);
- 2. At least three courses in health psychology;
- 3. Participation in a research project involving health psychology;
- 4. Completion of a Ph.D. dissertation that includes a health psychology component.

Hours Required to Complete a Ph.D. Program

Credit for Graduate Work Completed Prior to Admission Credit may be given for equivalent work in health psychology done in a prior advanced program (e.g., M.A. or M.S. program), but such transfer of credit must be approved by the student's supervisory committee on an item-by-item basis. No courses in which the student obtained less than a grade of B will be transferable. The student's supervisory committee will determine, on a case-by-case basis, which courses are acceptable. Regardless of how many hours obtained prior to admission into a health psychology track are included in the student's Ph.D. program, the student must meet the core program requirements listed above (i.e., methodology, three courses in health psychology, and participation in a research project involving health psychology) after they are admitted.

Total Hours Required

The health psychology discipline expects its Ph.D. students to complete a program of approximately 90 credit hours, including the combined didactic and research hours from all disciplines and credits transferred from graduate work done prior to admission. Whether for a coordinating discipline or a co-discipline, the hours counting toward the requirements of the health psychology discipline will normally be selected from the health psychology curriculum, but the student's supervisory committee may, at its discretion, include courses from related disciplines if this fosters the integrity of the program.

Other Discipline-Specific Special Requirements

Students with health psychology as a co-discipline must complete either: (1) an M.A. thesis or (2) a substantial piece of research in health psychology that is approved by the supervisory committee. Normally this will be publishable and of enough import to be accepted for publication or presented at a regional, national or international professional meeting. This requirement can only be waived after approval by the Health Psychology Interdisciplinary Ph.D. Committee.

Comprehensive Examination Guidelines

The supervisory committee will design the comprehensive examination. A wide range of formats is acceptable for the comprehensive examination. Normally, comprehensive examinations will be integrated with those in the other discipline. The student's supervisory committee will determine format after consultation with the student.

History

Discipline Coordinator

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Doctoral Faculty Participation

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Lawrence Larsen (E)	William Worley (A)
Dennis Merrill	Shona Kelly Wray

History is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Except in unusual circumstances, students who select history as a discipline must begin their work during the fall term. Applications must be received by the School of Graduate Studies no later than February 15, and will be forwarded to the Department of History by March 15. The doctoral faculty of the Department of History will review applications and make their recommendations for admission by the end of March. Applications that are incomplete as of March 15, and completed applications submitted after this deadline, may not be considered until the following year.

Applicants who choose history as their coordinating discipline, or applicants whose coursework in history will comprise at least 50 percent of the Ph.D. plan of study, must:

- 1. Possess a master's degree in history, or its equivalent; and
- 2. Have earned a GPA of 3.5 in graduate courses.

Students who choose history as a co-discipline and whose coursework in history will constitute less than 50 percent of the Ph.D. plan of study must meet the criteria for admission specified by the School of Graduate Studies. In addition, they must fulfill other entrance requirements specified by the doctoral faculty of the Department of History. These requirements are established on an individual basis. All applicants for admission must submit:

- 1. A sample of written work;
- 2. A brief statement of academic and professional goals;
- 3. A 1,000-word essay that specifies a dissertation topic, demonstrates its interdisciplinary nature, and shows how historical methods and approaches would be utilized; and
- 4. A written statement of support from a doctoral faculty member of the department who would be willing to serve as the applicant's faculty mentor.

Applicants who do not meet the requirements specified above may be granted provisional admission by the doctoral faculty of the Department of History. An applicant admitted povisionally receives notification of deficiencies and of the conditions which must be met before the doctoral faculty will again consider an applicant for full admission.

The doctoral faculty of the Department of History, in consultation with the history faculty as a whole, makes recommendations to the dean of the School of Graduate Studies on each application for admission. These recommendations reflect the majority vote of the doctoral faculty.

Applicants are advised that meeting the criteria of the School of Graduate Studies and the Department of History does not automatically result in admission to the Interdisciplinary Ph.D. program. When making recommendations to the School of Graduate Studies, the history faculty considers other factors as well, particularly the availability of faculty qualified to work in the applicant's area of interest and the availability of library resources and research materials.

Alternate Admission Criteria

In exceptional cases, candidates who do not meet either the School of Graduate Studies' or the History Department's minimum requirements for admission may be admitted under alternate criteria. The doctoral faculty of the department have adopted the following alternate criteria, one or more of which will be used to assess the applicant's ability: satisfactory performance in 500- or above-level classes taken in the department's master's degree program; positive, written recommendations of our faculty (willing to work with the applicant) who have evaluated his/her previous work; satisfactory completion of specified courses in the department before consideration or reconsideration of a candidate's application; and publications or comparable professional achievements related to the study of history.

The Plan of Study

If full admission is granted, the student who chooses history as a discipline must satisfy the residency requirements of the School of Graduate Studies, and must fulfill the course requirements of the Ph.D. plan of study as prepared by the student and his/her adviser(s) and approved by the Interdisciplinary Ph.D. Executive Committee.

A student whose coordinating discipline is history will be required to list at least 18 hours of gradute-level history courses (exclusive of dissertation credits) on the plan of study. These will include: 3 hours of History 680; 3 hours of History 687; 6 hours minimum of History 697 (or at least one independent readings course with each member of the department on the Supervisory Committee); at least 6 hours of additional graduate-level work in courses numbered 500 or above.

Students for whom history is a co-discipline will be required to take, at the minimum, the four core courses of the department's M.A. program (History 581–Research Methodology; History 587R–Research Seminar; and two graduate colloquia), as well as History 680 (Doctoral Colloquium). In exceptional or unusual circumstances, some of these hours may be waived upon petition to the student's Supervisory Committee.

Suggested Compatible Co-disciplines

English, geosciences, political science, public affairs and administration, psychology, education, economics, sociology, urban leadership and policy studies in education.

Comprehensive Examination

The History Department requires that the comprehensive examination of a student listing history as a discipline include both a written and an oral component. For coordinating discipline students, the written component will cover three areas: methods of and approaches to history; a general field of history; and a specific field of history related to the dissertation topic.

For co-discipline students, the written component will cover two areas: methods of and approaches to history; and a specific field of history related to the dissertation topic. It is expected that in the oral exam, questions of an interdisciplinary nature will be asked of both coordinating and co-discipline students.

Both coordinating and co-discipline students must consult with the history faculty on their committee during the semester before they expect to take the comprehensives and prepare a list of readings which will form the basis for the questions that will be asked on the exams. See the appended list of general and specific fields offered by the department.

Dissertation Requirements

A student for whom history is a discipline must meet the School of Graduate Studies requirements for the dissertation. On a Ph.D. plan of study, where history is the coordinating discipline, there must be a minimum of 12 credits in History 699 (dissertation hours).

Language Requirements

Those students for whom history comprises 50 percent or more of the program of study, or whose dissertation will utilize sources in a foreign language or languages, must demonstrate competency either through a passing satisfactory score on the ETS language examination, or through a special examination approved by the student's examining committee.

Those students for whom history comprises less than 50% of the plan of study, and whose dissertation will not utilize sources in a foreign language, will ordinarily not be required to demonstrate language competency. It is strongly urged, however, that all Ph.D. students choosing history as a primary discipline will pursue the development of foreign language skills or equivalent (quantitative) research skills.

Retention in the Doctoral Program

A doctoral student must maintain a 3.0 grade-point average in each semester of coursework taken at UMKC. A student who falls below a 3.0 GPA, or whose work is deemed unsatisfactory by his/her supervisory committee, may be declared ineligible for further study. In exceptional cases, such a student may petition to be placed on probation for one semester. A person receiving a failing grade in a class will normally not be retained in the doctoral program.

Mathematics

Discipline Coordinator Jie Chen, (816) 235-2844, chenj@umkc.edu

Doctoral Faculty Participation

Jie Chen	Noah Rhee
James Foran	Yong Zeng

During academic year 2004-2005, the Department of Mathematics and Statistics will not admit graduate students. At the present time, the faculty are engaged in a comprehensive planning initiative, in consultation with the Dean of the College of Arts and Sciences and other departments and schools at UMKC, that has as its goal a complete redesign of the graduate program. The departments target is to reopen admissions for the 2005-2006 academic year.

Mathematics is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

An applicant selecting mathematics as a discipline will be expected to have a baccalaureate degree with a major in mathematics from an accredited college or university. Students who do not have an undergraduate mathematics major must present evidence of a strong performance in at least three mathematics courses beyond calculus and meet the general admission requirements of the School of Graduate Studies.

Qualifying Requirements for Full Admission

Mathematics as Coordinating Unit

Full admission to doctoral studies is considered on completion of coursework equivalent to the master's degree and passing a qualifying examination. For students provisionally admitted to Interdisciplinary Ph.D. study, the master's degree examination will serve as the qualifying examination. At its discretion, however, the doctoral faculty of the Department of Mathematics or its designated representatives may set different pass levels for the master's degree and for the qualifying examination and may, in exceptional circumstances, accept a master's degree in mathematics from another institution in lieu of the qualifying examination.

Mathematics as a Co-discipline

Students who are provisionally admitted with mathematics as a co-discipline will be advanced to full admission after successfully completing 6 hours at the graduate level in the department, satisfying any other requirements stated at the time of admission, and being recommended for full admission by the coordinating-unit discipline.

Suggested Compatible Co-disciplines

Computer networking, chemistry, education, physics, geosciences and engineering.

Core Program Requirements

The requirements for the Ph.D. fall into five major categories: coursework, special requirements set by the supervisory committee, interdisciplinary work, comprehensive examination and dissertation.

Mathematics as Coordinating Unit

After provisional admission, students with mathematics as the coordinating-unit discipline must receive credit for two courses (6 semester hours) at the 500-level or above in three of the four

areas: algebra, analysis, applied mathematics and statistics, and topology and set theory. A minimum of 18 semester hours will therefore be necessary to satisfy this requirement; however, transfer credit may be accepted.

The interdisciplinary work of students with mathematics as the coordinating-unit discipline will consist of a minimum of 6 hours of coursework at the 500-level or above in an area acceptable to the supervisory committee. The committee may require more if such courses are appropriate to the student's area of research. The student's dissertation must represent a significant contribution to mathematics.

Mathematics as a Co-discipline

The number of hours required in mathematics for a student who chooses mathematics as a co-discipline will be the greater of 12 credit hours and the number of hours required by the student's coordinating discipline when it functions as a co-discipline. Up to 6 of these credit hours may be at the 400-level.

Other Discipline-Specific Special Requirements

The supervisory committee may impose additional requirements on a student if the requirements are relevant to the chosen areas of research. Examples include, but are not limited to, a facility in one or more foreign languages sufficient to read the mathematical literature pertinent to the dissertation and completion of graduate coursework in a related discipline.

Comprehensive Examination Guidelines

The student with mathematics as the coordinating-unit discipline must pass a comprehensive exam over three of the four areas: algebra, analysis, applied mathematics and statistics, and topology and set theory. The comprehensive exam may be taken after completing 30 hours at the 500-level or above and completing any special requirements and interdisciplinary requirements.

Molecular Biology and Biochemistry

Discipline Coordinator

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Doctoral Faculty Participation

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Stephen J. King	Gerald J. Wyckoff
William T. Morgan	-

Molecular Biology and Biochemistry is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

No additional requirements. Due to the sequencing of coursework, new students selecting molecular biology and biochemistry as their coordinating unit will normally only be admitted in the fall term. In general, initial admission will be granted into an M.S. track leading to full admission to the Ph.D. program.

Qualifying Requirements for Full Admission

Minimum of 16 hours of approved graduate coursework at UMKC toward the Ph.D. program with a grade-point average

of at least 3.0. International students must establish English proficiency.

Suggested Compatible Co-disciplines

Other sciences, such as chemistry, cell biology and biophysics, pharmaceutical science, pharmacology, oral biology and physics.

Core Program Requirements

For Students with this Discipline as the Coordinating Unit Minimum core requirement is 30 course credit hours and 15 dissertation research credits in molecular biology and biochemistry for a total of 45 post-baccalaureate credit hours, distributed as indicated below: Discipline courses required:

- Biochemistry LSMBB 561 (4 credits);
- Biochemistry LSMBB 562 (4 credits);
- Experimental Molecular Biology LSMBB 596 or 597 (2 credits);
- Seminar in Molecular Biology and Biochemistry LSMBB 611 (2 credits);
- LSMBB 690/LSCBB 690 Analytical Methods (5 credits).

An additional 3 credits must be selected from among the following courses for a total of 20:

- Eukaryotic Molecular Biology, LSMBB 503 (3 credits);
- Structure and Function of Proteins, LSMBB 565 (3 credits);
- Physical Biochemistry, LSMBB 567 (3 credits).

Related Discipline Courses Required

Ten additional course credit hours in one related discipline or combination of disciplines. Related disciplines are defined as cell biology and biophysics, chemistry, pharmaceutical sciences, pharmacology, oral biology or other. Seminar courses may be part of this component of required courses, up to a maximum of three for the program, as are two additional credits of advanced experimental molecular or cell biology.

Electives

Each student's supervisory committee may require additional courses in any university-approved doctoral discipline as preparation for specific areas of research. These additional requirements may not exceed 9 credit hours beyond the 30 credits required for the basic course core. These electives may be taken at any time during enrollment as a graduate student, up to the semester prior to that in which the dissertation defense will occur. No more than 7 course credit hours of 500-level courses, or their equivalent, can be taken at institutions outside UMKC. Remember that 700-level courses may not be used to satisfy course requirements for the program.

For Students with this Discipline as a Co-discipline Students who select this discipline as a co-discipline must take a minimum of 11 credit hours of core courses, including:

- LSMBB 561 General Biochemistry I (4 credits);
- LSMBB 562 General Biochemistry II (4 credits);
- LSMBB 612 or LSMBB 611 (1 credit);
- Plus sufficient additional core courses to constitute the required percentage of the overall program of study.

Other Discipline-Specific Special Requirements

Research

The School of Biological Sciences offers research opportunities in many areas of modern life sciences that address problems of basic life processes at the cellular, subcellular and molecular levels. Graduate studies offered with primary participation of the faculty in the Division of Molecular Biology and Biochemistry are based on the belief that training for research can be best accomplished by having an appropriate breadth of background coursework, combined with a depth of specialization in a particular research area. The faculty have established guidelines that have a minimum of formal requirements so that students have the flexibility to advance at a pace consistent with development of the individual. Diligence, creativity and independent thinking are the qualities desired in the candidate's dissertation work.

Teaching

As part of their graduate training, all Ph.D. students with molecular biology and biochemistry as the coordinating-unit discipline participate in the teaching program of the School of Biological Sciences. This is an important component of preparation for a career in academia or other institutions, and aids in the development of effective communication skills.

Seminars

Students will participate in seminars in which current developments in various areas of life sciences will be discussed and explored. Students also will present seminars on their own work or on work in the current scientific literature. The latter is taken as part of the core of graduate-level courses in the coordinating or co-disciplines.

Course Restrictions

700-level courses may not be used to satisfy molecular biology and biochemistry discipline-specific course requirements.

Dissertation

The dissertation abstract and proposal must be submitted to and approved by the supervisory committee prior to beginning the third academic year of study after enrollment in the Ph.D. program.

Retention in Program

A minimum B grade in LSMBB 561 and 562 is required to remain as a doctoral student in this discipline.

For students with this discipline as their coordinating-unit discipline, no more than one C grade in a core course or two C grades in any course, and no D or F grades, are permitted. A student who receives more than two C grades will be recommended for termination from the doctoral program. A student who receives a D or F grade will be dropped from the program.

The doctoral faculty in molecular biology and biochemistry meets formally at the end of each academic year to discuss and evaluate the progress of all graduate students. Each student's committee also meets with the student at least once a year. After the annual doctoral faculty meeting, all students receive written evaluations of their status and a report is placed in each student's file.

Comprehensive Examination Guidelines

To become a Ph.D. candidate, the student must pass a comprehensive exam that may be taken on completion of essentially all of the coursework specified in the student's study plan and on satisfactorily fulfilling the requirements for full admission. This must be done before the *beginning* of the third academic year after admission to UMKC with graduate student status, or (for part-time students) immediately after completion of 25 credit hours approved by the discipline-doctoral program at UMKC. This exam will be administered by the student's supervisory committee and will test the student's knowledge of background material, as well as the student's ability to analyze and interpret information, and solve problems.

Written Portion

The written examination for students who have molecular biology and biochemistry as their primary discipline has two components. The first component consists of a written, general comprehensive exam testing an integrated knowledge of material acquired through the courses and the seminar components in the primary and secondary disciplines. The second component of the written examination consists of an NIH-style grant proposal that the student will prepare. The topic of the research proposal will be determined by the student in consultation with the student's supervisory committee.

Oral Portion

The oral examination also has two aspects: (1) questions covering the grant proposal prepared by the student for the written examination and (2) other related material in the student's area of specialization, including fundamental knowledge of the primary and secondary disciplines.

Music Education

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Doctoral Faculty Participation

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Music Education is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

In addition to the general criteria, applicants selecting music education as a discipline must:

- Have an aggregate minimum undergraduate GPA of 3.0 and graduate GPA of 3.5 on a 4.0 scale;
- Submit a thesis or equivalent evidence of written scholarship;
- Have a combined score of 1500 on the verbal, quantitative, and analytical sections of the GRE with no individual score below 350;
- Have an acceptable on-campus interview with doctoral faculty members from this discipline;
- Demonstrate comprehensive musicianship through videotape, performance, classroom teaching, audition or jury;
- Have a minimum of three years K-12 teaching or music therapy clinical experience or the equivalent;
- Perform an applied audition.

Alternate Admission Criteria

Applicants may ask to be considered under the following alternate admission criteria:

- Have an undergraduate GPA of 3.0 or a graduate GPA of 3.5;
- Submit a thesis or equivalent evidence of written scholarship;
- Score 900 or above on the SAT with both the verbal and math scores above 400; or score 21 or above on the ACT;
- Have an acceptable off-campus interview with at least two UMKC music education/therapy doctoral faculty or have two written recommendations from UMKC doctoral faculty;

- Have a minimum of three years K-12 teaching/clinical experience or the equivalent;
- Demonstrate comprehensive musicianship through a cassette tape or videotape;
- Perform an applied audition.

Qualifying Requirements for Full Admission

- Have a GPA of at least 3.5 in courses to be counted for the degree;
- Have an acceptable interview with members of the student's supervisory committee;
- Have acceptable scores on designated tests covering music history, music theory and music education/therapy.

Suggested Compatible Co-disciplines

Education is the primary co-discipline. Other potential co-disciplines can be considered by students in consultation with coordinating discipline coordinator and faculty.

Core Program Requirements

Music education will function only as a coordinating unit in the UMKC Interdisciplinary Ph.D. program. Because of this, the following minimum standards apply only to students with music education as their coordinating unit.

Research

Two important goals for students with music education as their coordinating discipline and education as a co-discipline will be to develop research skills and increase their awareness of important research literature. Through introductory courses at the Conservatory, students will become acquainted with research techniques, problems and literature in music education/therapy. Additional research courses in the School of Education and other academic units will provide more tools for structuring research designs and analyzing data. Students in the program will assist their faculty mentors in research while developing a research agenda of their own. The number and nature of research classes placed on each student's program of study will be determined by the background, goals and interests of the student.

Teaching Techniques and Philosophies

While students may have widely divergent career goals, ranging from becoming a district music supervisor in a K-12 program training undergraduate music therapists, or to being a college choral conductor, all will be actively involved in the education process in some form. To develop a comprehensive acquaintance with education at all levels, Ph.D. students will enroll in methods classes, will be assigned to observe and teach undergraduate classes at UMKC, and will observe and help supervise student teachers in local K-12 schools. Courses in the Conservatory, the School of Education, and other academic units will help students efficiently interpret the techniques and philosophies they observe in the classroom, determine their own goals and philosophies, and consequently, become better teachers.

Because faculty members from the Conservatory and the School of Education strongly believe that theories, philosophies, and techniques associated with teaching carry more meaning for those who have experienced the teaching environment, the Ph.D. requires three years of K-12 teaching experience, music therapy clinical practice, or the equivalent for admission to the program.

Seminars and Core Courses

While research and teaching are areas of great importance, it is anticipated that most students will need theoretical information to structure their teaching and research endeavors. Courses in theories of learning in general and in music, as well as seminars on the latest teaching techniques and methodologies, will give students a knowledge base to better facilitate their own teaching and to prepare future students to teach. Particular attention will be given to cultivating critical thinking skills in students and nurturing multicultural values.

Program Requirements

It is anticipated that most students selecting music education and education as their disciplines will have completed a master's degree in music education or a related field. Students with backgrounds in music therapy are also encouraged to apply.

While total degree-hour requirements for the Ph.D. will vary depending on each student's career goals, previous experience, and training, it is anticipated that for most students, course requirements will include 35 to 45 pre-dissertation hours. If a student has completed a bachelor's or master's degree in some area other than music education/therapy, additional work beyond this approximate range will probably be required. No specific course requirements are designated. Depending on the previous work of the individual and the career direction sought, each program of study, including foreign language requirements, will be considered on an individual basis.

Co-discipline Requirements

Education is the primary co-discipline for music education in the Interdisciplinary Ph.D. program. It is anticipated there will be many permutations which are a product of this combination. A student's interests in School of Education classes may gravitate toward research, curriculum and instruction, administration, counseling, philosophical and historical foundations or an infinite number of additional possibilities. Within the spirit of flexibility, which is the essence of the Interdisciplinary Ph.D. program, students are allowed to enroll in other fields of study such as history, philosophy, psychology, art and non-music education/therapy Conservatory classes. The primary area of study outside music education and/or music therapy will constitute from 15 to 50 percent of pre-dissertation hours in the planned program of study.

Comprehensive Examination Guidelines

Written and oral comprehensive exams will be taken during the semester when the student completes all, or (in some special cases) nearly all, of the classes outlined in the planned program of study or the semester immediately following the completion of classes. This could include the summer term, depending on the availability of supervisory committee members. The exams must be scheduled with the supervisory committee no later than four weeks before they are to occur. No particular period is designated specifically for comprehensive exams; however, the oral exam should be taken the week following the written portion. The comprehensive exam will include a total of 18-24 hours of written and oral questions. The hours will be divided between the coordinating unit of music education (not to exceed 60 percent of the total number of hours on the exam) and the co-discipline of education (15-40 percent of the hours) so as to reflect the student's planned program. Exams in the coordinating area of music education will include 12-18 hours of written questions in the student's major area (e.g., choral music education, general music education, instrumental music education). A Ph.D. student may elect to substitute written research projects previously approved by the supervisory committee for this portion of the exam. Examples of such projects would include, but are not limited to, preliminary research distinct from the dissertation or the development of a curriculum project for a designated level and subject matter. In addition, a 2-hour oral exam pertaining to research projects and courses completed by the student, a 3-hour written exam relating to general knowledge of music research techniques

and procedures, and a 1-hour written exam pertaining to music education or music therapy history and philosophy will be required.

Oral Biology

Discipline Coordinator

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Doctoral Faculty Participation

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Oral Biology is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

In addition to the general minimum requirements for admission to interdisciplinary Ph.D. study, an applicant must hold either (1) a baccalaureate degree, or (2) a D.D.S. or equivalent degree. In general, an applicant will be expected to have a minimum cumulative GPA of 3.0 (based on a 4.0 scale) for all undergraduate work, including dental school (if applicable).

All application materials should be submitted prior to March 1 for students wishing to begin their study in the fall semester; however, applications will be accepted throughout the year. Evaluation criteria include the following:

- Transcripts. Analysis of transcripts from all prior institutions is required. Under special circumstances (e.g., class standing) consideration may be given to applicants whose GPA is 2.5 to 3.0;
- Letters of recommendation. Three letters of recommendation are required from current or former teachers who are familiar with the applicant's past achievements and research ability;
- Letter from applicant. The applicant must submit a letter describing why he or she is interested in pursuing interdisciplinary Ph.D. study in oral biology, how the experience of the program may be used by the candidate in the future, and a list of potential research interests;
- Interviews. Interviews are not required; however, interviews at the School of Dentistry will be arranged upon the candidate's request. Successful interviews may enhance the candidate's chance of acceptance.

Suggested Compatible Co-disciplines

Cell biology and biophysics, molecular biology and biochemistry, pharmacology, chemistry, physics, engineering and computer science.

Qualifying Requirements for Full Admission

Applicants will be notified of any qualifying requirements to be satisfied at the time an admission decision is made.

Core Program Requirements

The required minimum core curriculum for students with oral biology as a discipline will consist of the following courses:

Biological Science 751 Elements of the Scientific Method

Biological Science 752 Research Methods in Oral Biology

Biological Science 740 Oral Pathology I

And one of the following:

Biological Science 802 Immunopathology Periodontics 730 Biology of the Periodontium *or* Biological Science 803 Structural Analysis of Biomaterials.

The student's supervisory committee may require additional courses for an Interdisciplinary Ph.D. program which includes the department of oral biology as the coordinating-unit discipline or as a co-discipline. Ph.D. students with oral biology as their coordinating unit must either complete these courses at UMKC or must have completed equivalent coursework at approved institutions at the time of their admission to the Interdisciplinary Ph.D. program. Students are referred to other sections of the current UMKC general catalog for listings of appropriate graduate-level courses.

In accordance with the general requirements for the Interdisciplinary Ph.D. program, a Ph.D. student must prepare a plan of study in conjunction with his or her dissertation supervisor and supervisory committee during the first year of Ph.D. studies. A student's plan of study must include coursework in oral biology as well as in at least one other discipline.

Other Discipline-Specific Special Requirements

Dissertation Research

In accordance with general Interdisciplinary Ph.D. program requirements, each student with oral biology as the coordinating-unit discipline must submit a dissertation proposal, prepared in consultation with the student's supervisory committee, which describes an interdisciplinary program of original research on a significant problem in oral biology. The proposal will be reviewed by the student's Ph.D. supervisory committee. The student may be required to revise and resubmit the proposal to the supervisory committee. A copy of the accepted proposal will then be forwarded to the dean of the School of Graduate Studies.

The student must provide evidence that a substantial portion of the dissertation will be submitted for publication to refereed journals. Such proof may be in the form of a manuscript in preparation for submission or a submitted manuscript. The student must submit the complete dissertation, in typewritten or letter-quality printed form, to his or her faculty adviser for review and preliminary approval at least eight weeks before the expected date of graduation.

Appeals

In the event of disputes or special requests concerning a student's Ph.D. program, written appeals or documentation must first be submitted to the student's supervisory committee. If a resolution of the problem cannot be affected at that level, the written appeals process must then progress through the following levels:

- 1. Doctoral studies committee of the Department of Oral Biology;
- 2. Interdisciplinary Ph.D. Executive Committee;
- 3. Dean, School of Graduate Studies.

Academic Retention

A 3.0 or better grade-point average is required of all work applicable to the Interdisciplinary Ph.D. program. A Ph.D. student with oral biology as a discipline is subject to termination from the Interdisciplinary Ph.D. program if: (1) his or her grade-point average falls below 3.0; (2) more than 4 hours of C (2.0) grades are received; or (3) any grade of D or F is received.

A recommendation for termination from the program will be made by the student's supervisory committee to the Department of Oral Biology and forwarded to the Interdisciplinary Ph.D. executive committee and the dean of the School of Graduate Studies.

Comprehensive Examination Guidelines

A comprehensive examination will be administered to all students enrolled in the Interdisciplinary Ph.D. program whose subject emphasis area is oral biology. The examination includes both written and oral components. Content of the comprehensive examination will be tailored to the student's field of research interest and prepared with input from all members of the student's supervisory committee.

Pharmaceutical Sciences

Discipline Coordinator

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Doctoral Faculty Participation

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Pharmaceutical Sciences is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Due to course sequencing, new students will ordinarily be accepted only in the fall term. Applicants must hold a professional degree in pharmacy (Pharm.D. or B.S.) or a baccalaureate degree in a related field such as chemistry, biology or mathematics with an undergraduate GPA of at least 3.0 on a 4.0 scale. Students who hold a master's degree in an appropriate discipline may be admitted on satisfaction of the general requirements of the School of Graduate Studies.

Qualifying Requirements for Full Admission

Admission depends on agreement of a member of the doctoral faculty in the discipline to serve as research adviser. All students are admitted provisionally except those holding an M.S. in pharmaceutical sciences. Full admission will be granted on satisfactory completion of 16 credit hours of courses recommended by the provisional pharmaceutical sciences faculty adviser during the first calendar year on campus. Students seeking admission to the pharmaceutical sciences discipline of the Interdisciplinary Ph.D. program should have completed coursework in calculus, organic chemistry, physical chemistry, biochemistry, microbiology, human anatomy and physiology where appropriate to their interests. Graduate students will be given a placement examination administered by the coordinating-unit discipline faculty in order to assess undergraduate preparation for graduate-level study. Deficiencies existing on admission must be discussed with the interim faculty adviser during the first two semesters of graduate work. Course equivalency is determined by the pharmaceutical-science discipline faculty on a case-by-case basis. Students are required to pass the

discipline placement exams before appearing for the comprehensive exams administered by the Supervisory Committee.

On admission, all students are assigned interim faculty advisers as stated in the letter of admission. Graduate students must adhere to the guidelines as stated in the School of Pharmacy Graduate Programs section of this catalog pertaining to selection and changes of faculty advisers.

Suggested Compatible Co-disciplines

Pharmacology, chemistry, cell biology and biophysics, molecular biology and biochemistry and oral biology.

Core Program Requirements

Pharmaceutical Sciences as the Coordinating Unit The minimum graduate credit hours generally required for the Ph.D. degree with pharmaceutical sciences as a discipline are 40 in didactic coursework, credit for presentation of three seminars, and 20 dissertation research credits. Specific courses in pharmaceutical science will be agreed upon in consultation with the coordinating-discipline supervisory faculty. Students will take a minimum of five courses offered by the coordinating-unit discipline. Attendance at all seminars in the coordinating-unit discipline is required, except when there is a scheduling conflict or an excuse approved by the seminar chair.

Three credit hours of statistics, plus 15 credit hours in pharmaceutical science coursework, and 22 credit hours in one or a combination of related co-disciplines are all required.

Other electives. A supervisory committee may require that additional coursework be taken to prepare the student in a specific research area.

Pharmaceutical Sciences as Co-discipline

The pharmaceutical sciences doctoral faculty member(s) of the supervisory committee will confer regarding the student's program of study and recommend appropriate courses offered by the co-discipline. Generally, courses in the co-discipline will constitute successful completion of at least 20 percent of the approved course of study. All students choosing pharmaceutical sciences as a co-discipline must complete at least three graduate-level courses in pharmaceutical sciences compatible with research objectives recommended by the supervisory committee.

Other Discipline-Specific Special Requirements

Requirements for Retention

Students who receive two C grades or one D grade in didactic courses are subject to dismissal from the program. A student who receives one F grade will not be retained. Students will not be allowed to attain more than one C grade in a co-discipline course.

Appeals

Appeals by graduate students on matters pertaining to research or studies in the discipline will be routed initially to the supervisory committee and managed according to the appropriate procedures established for the Division of Pharmaceutical Sciences, School of Pharmacy.

Comprehensive Examination Guidelines

Ph.D. students who choose pharmaceutical sciences as the coordinating discipline must successfully pass a qualifying examination given by the division prior to applying to take their written and oral comprehensive examinations. Once the qualifying examination has been successfully completed, the comprehensive examinations will be given after the student has completed the majority of didactic coursework requirements but not later than the end of the third year. The examinations will be administered by the student's supervisory committee. The comprehensive examinations (written and oral) must be

passed before a doctoral student can be admitted to candidacy. Before the comprehensive examination can be taken, the student must submit and have accepted a research proposal in a form satisfactory to the supervisory committee. The comprehensive examination will be administered by the student's supervisory committee and will consist of both written and oral components.

Pharmacology

Discipline Coordinator

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Doctoral Faculty Participation

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Pharmacology is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Due to course sequencing, new students will ordinarily be accepted only in the fall term. Applicants must hold a professional degree in pharmacy (Pharm.D. or B.S.) or a baccalaureate degree in biological, chemical science or health science. In special situations, baccalaureate degrees in other disciplines will be evaluated for possible admission. For graduates of foreign schools, the applicant must have completed a course of study at least the equivalent of a U.S. baccalaureate degree.

Prospective students must have an aggregate minimum grade-point average of 3.0 on a 4.0 scale for all college work taken prior to the bachelor's degree, or an aggregate GPA of at least 3.5 on all post-baccalaureate work to date (minimum of 9 hours). For graduates of foreign schools, the applicant must have above-average grades in previous college study.

Qualifying Requirements for Full Admission

Students seeking admission to the pharmacology discipline of the Interdisciplinary Ph.D. program should have completed coursework in organic chemistry I & II, biochemistry I & II, calculus, anatomy, microbiology, physiology I & II, and a biostatistics course. Deficiencies existing on admission must be satisfied during the first two semesters of graduate work. In addition, during the first year of graduate study, provisional Ph.D. students with pharmacology as a discipline must complete the following courses with a grade of B or better: Pharmacy 519 (4 hours), Pharmacy 520 (5 hours), and Pharmacy 615 (3 hours), or their equivalents. Equivalency is determined by the pharmacology discipline faculty on a case-by-case basis.

Suggested Compatible Co-disciplines

Pharmaceutical sciences, cell biology and biophysics, chemistry, molecular biology and biochemistry, or other related fields in health sciences that offer Ph.D. degrees.

Core Program Requirements

Pharmacology as Coordinating-unit Discipline Specific course requirements will be determined by the student in consultation with the research adviser and the supervisory committee. Generally, 65 post-baccalaureate credit hours, including 20 hours of research and dissertation and 45 hours of coursework, are required for the Ph.D. degree. No more than 27 credit hours (60 percent) can be obtained from a single discipline (preferably in pharmacology). The remaining 18 credit hours (40 percent) can be obtained from one or more participating disciplines. No more than 25 percent of the coursework from the non-participating disciplines will be counted toward the Ph.D. degree. More co-disciplines will be required. As many as 15 credits may be allowed for courses taken in a master's degree program at another institution with the concurrence of the student's supervisory committee.

The total of 27 hours required for pharmacology as the coordinating discipline will be composed of Pharmacy 519 (4 credits), Pharmacy 520 (5 credits), Pharmacy 615 (3 credits), 3 hours of Pharmacy 580C (pharmacology seminar), and 12 additional hours of advanced courses (500-level or above) in pharmacology or toxicology as approved by the supervisory committee.

In the remaining 18 hours, 3 credit hours of statistics, plus 15 credit hours in one or a combination of co-disciplines, which may include cell biology and biophysics, chemistry, molecular biology and biochemistry, oral biology, pharmaceutical sciences or other pertinent areas as approved by the supervisory committee.

Other Electives

A supervisory committee may require that additional coursework be taken to prepare the student in a specific research area. This additional requirement may not exceed 6 credit hours, may be taken in any approved doctoral discipline, and must be completed prior to the semester in which the dissertation defense occurs.

Pharmacology as Co-discipline

Students who apply for Pharmacology as a co-discipline should have completed coursework equivalent to Pharmacy Physiology I & II (LS-PHSL 399 and 400) and Human Biochemistry I & II (Bio-Sc 365G and 366G), which are offered at UMKC. Deficiencies existing on admission must be satisfied during the first two semesters of graduate work. When pharmacology is chosen as the co-discipline, the minimum course requirements are completion of Pharmacy 519 (4 credits), Pharmacy 520 (5 credits) and 1 credit hour of seminar (Pharmacy 580C), plus sufficient courses constituting the required percentage of their program of study, as approved by the supervisory committee. No more than one C grade in any core course will be permitted. Students who receive more than one C grade or lower will be dropped from pharmacology as a co-discipline. Students must take and successfully pass a written and oral comprehensive examination administered by the supervisory committee members from the Division of Pharmacology. Co-discipline students should take the pharmacology comprehensive examination no later than one semester after completing their required co-discipline coursework.

Other Discipline-Specific Special Requirements

Additional Coursework

Students will be expected to complete at least 3 credit hours of statistics. Students are expected to take sufficient computer courses or training as to be proficient in word processing and the use of spread sheets and data bases.

Retention in Program

Graduate students are required to maintain a cumulative grade-point average of B (3.0 on a 4.0 scale). In any semester when the cumulative GPA falls below 3.0, the graduate student will automatically be placed on probation. The student is

allowed one semester to return to good academic standing (cumulative GPA of 3.0). A graduate student should not let the cumulative GPA fall below 3.0 in two semesters throughout the entire program. Students who receive a grade of C in 6 credit hours or more, or who receive a grade lower than C, or one no-credit grade will be dismissed from the graduate school. Any C grade in courses offered by the pharmacology division should be repeated no more than once.

Appeals

For special requests or disputes concerning a student's Ph.D. program, written appeals with documentation must first be submitted to the student's supervisory committee. If a resolution of the problem cannot be obtained at the supervisory committee level, the written appeals process must then progress through the following levels:

- 1. Division Chair, pharmacology;
- 2. Graduate Programs Committee, School of Pharmacy;
- 3. Interdisciplinary Ph.D. Executive Committee;
- 4. Dean, School of Graduate Studies.

Comprehensive Examination Guidelines

The comprehensive examination must be taken before the beginning of the student's third year after admission to full-time graduate study at UMKC. The comprehensive examination consists of both written and oral examinations.

Written Examination

The written examination will consist of essay-type questions submitted by the members of the supervisory committee and will cover fundamental knowledge in the coordinating discipline and co-disciplines. The written examination must be satisfactorily passed before proceeding on to the oral examination, which should be taken within two weeks of successfully passing the written examination.

Oral Examination

The oral examination shall consist of material related to the student's area of research specialization, as well as fundamental knowledge of the coordinating discipline and co-disciplines.

On satisfactory completion of the written and oral portions of the comprehensive examination, the student becomes a candidate for the Ph.D. In the event a student does not pass the examination, one additional attempt may be made at a date no sooner than 12 weeks, and within one year, of the original attempt. A student who fails either the written or the oral examination a second time will be automatically dropped from the program. A student must pass the doctoral comprehensive examination and advance to Ph.D. candidacy within four years from the beginning of doctoral coursework (within three years if entering with a master's degree in the same or closely related field). After the establishment of degree candidacy, a maximum of four years will be allowed for completion of degree requirements (three years for students with a master's degree). Failure to complete the work within the periods specified will necessitate re-evaluation of the entire program and may result in a notice of termination.

Physics

Discipline Coordinator

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Doctoral Faculty Participation

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Physics is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

For admission to the program, an applicant must meet both the Interdisciplinary Ph.D. and specific physics admission requirements. The doctoral studies committee of the Department of Physics will review applications and make admission recommendations to the Interdisciplinary Ph.D. Executive Committee. The basic criterion for admission is the likelihood that an applicant will be successful in the Interdisciplinary Ph.D. program, particularly in the research component of the program. All applicants must satisfy the doctoral studies committee that they meet this criterion through such evidence as transcripts, letters of recommendation, statements of purpose, GRE scores (general and subject), performance on the department written examination, etc. Furthermore, a member of the doctoral faculty must be willing to accept the applicant as a research student. International students are required to have a TOEFL score of at least 550 (213 CBT) for admission and 575 (230 CBT) to be eligible for a teaching assistantship.

Qualifying Requirements for Full Admission

In addition to the above requirements, applicants must meet the following minimum requirements for the appropriate category listed below to be considered for full admission with physics as a discipline. The doctoral studies committee may recommend provisional admission for those applicants who fail to meet these requirements.

Applicants for admission to the Interdisciplinary Ph.D. program electing physics as their coordinating discipline must have a bachelor's or master's degree in physics or the equivalent. Those applicants holding only a bachelor's degree will be expected to provide exceptionally strong evidence of their academic ability and research capability in physics.

Applicants for admission to the Interdisciplinary Ph.D. program electing physics as their co-discipline must hold at least a bachelor's degree in a compatible field. These applicants must have successfully completed coursework in physics beyond a first (general or engineering physics) introductory course and must have mathematical background sufficient for advanced coursework in physics.

Suggested Compatible Co-disciplines

Computer networking, mathematics, chemistry, geosciences, telecommunications networking, education and engineering.

Core Program Requirements

The credit hour requirement for Ph.D. students with physics as a discipline will depend on the student's entering status and individual program.

Physics as a Coordinating Unit

For Ph.D. students with physics as the coordinating discipline, the following are the core graduate-level courses:

- Physics 500-501 Methods of Mathematical Physics I, II
- Physics 510-511 Theoretical Mechanics I, II
- Physics 520-521 Electromagnetic Theory I, II
- Physics 530-531 Quantum Mechanics I, II
- Physics 540 Statistical Physics I
- Physics 550 Atomic and Molecular Structure
- Physics 630 Advanced Quantum Theory

Students with physics as their coordinating-unit discipline must either complete these courses at UMKC or must have already completed equivalent coursework at approved institutions at the time of their admission to the Interdisciplinary Ph.D. program at UMKC.

Physics as a Co-discipline

A student selecting physics as a co-discipline will be required to complete 12 credit hours in physics courses. Up to 6 of these credit hours may be at the 400 level.

Other Discipline-Specific Special Requirements

Retention in Program

Ph.D. students with physics as their coordinating-unit discipline must maintain a 3.25 grade-point average. Students with physics as a co-discipline must maintain a 3.0 GPA in physics courses. A student's failure to maintain the minimum GPA will result in a probationary status for the following semester. A failure to remove the GPA deficiency during the probationary semester will then result in the student's dismissal from the Interdisciplinary Ph.D. program.

Appeals

Exceptions to any of the discipline-specific regulations must be approved by the student's supervisory committee and by the physics doctoral studies committee. In the event of disputes or special requests concerning a student's Ph.D. program, written appeals and/or documentation must first be submitted to the student's supervisory committee. If a resolution of the problem cannot be affected at that level, the written appeals process must then progress through the following levels: (1) Doctoral studies committee of the Physics Department; (2) Interdisciplinary Ph.D. Executive Committee; (3) Dean of the School of Graduate Studies.

Comprehensive Examination Guidelines

Physics as Coordinating Unit

Departmental Written Examination

During April of each year, the Department of Physics will administer a written, multi-level examination of all active M.S.-level students in physics and Interdisciplinary Ph.D. students with physics as their coordinating-unit discipline. The four-part examination will be given during four sessions of 4 hours each on consecutive Saturdays. Each part of the examination will contain questions at the advanced undergraduate and graduate levels. The following subject areas will be addressed by the four parts of the examination:

- 1. Mechanics and mathematical physics;
- 2. Electromagnetism and optics;
- 3. Modern physics, relativity and quantum mechanics;
- 4. Thermodynamics, statistical mechanics and condensed matter physics.

Students may pass the written examination at the following ascending levels of achievement:

- 1. Master's degree passing necessary for the M.S. degree;
- 2. Ph.D. qualifying necessary for admission to or retention in the Interdisciplinary Ph.D. program;

3. Ph.D. comprehensive passing - necessary to advance to Ph.D. candidacy.

Students need only pass the written examination once at any given achievement level. But, all graduate students must attempt the exam every year until they pass it at the appropriate level, unless they are granted an exception via a petition to the physics doctoral studies committee.

A maximum of two attempts at each level will be permitted, and any student who does not attempt the examination when required to do so will be deemed to have failed the examination. Students who are required to take this examination are encouraged to consult with the Department of Physics for detailed information concerning procedures and regulations for the examination.

Comprehensive Examination by Committee

The comprehensive examination administered by the student's supervisory committee can be taken only after the student has passed the departmental written examination at the Ph.D. comprehensive level. It may be oral, written or both, and may include the student's dissertation proposal and associated background material.

Physics as Co-discipline

The student's supervisory committee will determine the comprehensive examination for students with physics as a co-discipline.

Political Science

Discipline Coordinator

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Thomas Magstadt (A)	G. Ross Stephens (E)

Political Science is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Applicants who designate political science as their coordinating unit must have an M.A. in political science or a related field with a 3.0 GPA and scores ranking above the 70th percentile on either the verbal or the analytical section of the GRE, or a combined score of 1200 in the two sections. All applicants also must submit samples of written work, including a one- or two-page preliminary proposal for an interdisciplinary plan of study and fulfill other requirements for full admission as determined by the political science doctoral faculty.

Applicants who designate political science as a co-discipline must have earned at least a 3.0 GPA in 12 or more hours in political science or closely related courses or otherwise demonstrate sufficient background in the discipline. Applicants must also submit samples of written work, including a one- or two-page preliminary proposal for an interdisciplinary plan of study and fulfill other requirements for full admission as determined by the political science doctoral faculty.

The political science doctoral faculty will recommend to the dean of the School of Graduate Studies whether or not an applicant should be admitted. It should be understood that a student who satisfies the criteria of the School of Graduate Studies and the requirements of the Department of Political Science may or may not be granted full admission to the Ph.D. program. Availability of faculty and resources will be among the factors determining admission.

Qualifying Requirements for Full Admission

Applicants who designate political science as their coordinating-unit discipline and lack an M.A. in political science or a related field may be admitted provisionally pending completion of an M.A. in political science at UMKC. Applicants who have an M.A. in another field but lack adequate preparation in political science may be admitted provisionally pending completion of designated undergraduate courses in the discipline. For full admission, applicants must also present a master's thesis or its equivalent in graduate-level written work and demonstrate acceptable research skills.

Students who designate political science as a co-discipline but lack adequate preparation in political science may be admitted provisionally, pending completion of designated undergraduate courses in the discipline.

Suggested Compatible Co-disciplines

Economics, history, public affairs and administration, psychology, sociology, and urban leadership and policy studies in education.

Core Program Requirements

Students with political science as their coordinating-unit discipline must take at least 12 hours in political science after the M.A., other than the dissertation. They also must take at least 12 hours in their co-discipline(s). If a co-discipline requires more than 12 hours, its requirement takes precedence. In general, students must take whatever specific courses are deemed necessary by their committees.

The amount of work required for the Ph.D. depends on the student's level of preparation. A student entering the Ph.D. program without an M.A. in political science may expect to do significantly more work than that required of a student with such a degree in hand.

Students with political science as their co-discipline must take at least 12 hours in political science as designated by their committees.

Comprehensive Examination Guidelines

These examinations are given twice a year. Further information is available from the department.

Psychology

Discipline Coordinator

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Doctoral Faculty Participation

James F. Collins Diane Filion Leah Gensheimer Kathleen Goggin (D) Christopher Haddock (D) Jay Hewitt Joseph Hughey Joseph La Fond Andre Moenssens Sharon Portwood Walker S. Carlos Poston II Charles Sheridan (E,D) Lisa Terre (D)

Psychology is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Psychology as Coordinating Unit

Psychology is appropriate as a coordinating unit for Interdisciplinary Ph.D. study for the exceptional student who has a thorough background in psychology. All applicants must be sponsored by a doctoral faculty member of the Department of Psychology. Applicants are responsible for contacting faculty with compatible interests to arrange sponsorship. Students who want help in identifying doctoral faculty in their areas of interest should call the Department of Psychology. In addition to sponsorship, the following minimal requirements must be fulfilled:

- 1. A preliminary program approved by the sponsoring faculty;
- 2. B.S. or B.A. in psychology or an advanced degree in a related discipline (e.g., counseling, special education);
- 3. At least a score of 1200 on the verbal and quantitative sections of the GRE;
- 4. Undergraduate GPA of 3.0 or better.

Beyond these minimal requirements, students are considered on a case-by-case basis and are required to submit the following information in addition to the standard application for Interdisciplinary Ph.D. study and necessary supporting documentation:

- 1. An up-to-date resume or vitae;
- 2. Reprints of all publications, if applicable;
- 3. Detailed statement of applicant's career and professional goals.

Psychology as Co-discipline

Psychology is appropriate as a co-discipline for the exceptional student who demonstrates a clear aptitude for graduate study of psychology. Accordingly, all applicants must be sponsored by a doctoral faculty member of the Department of Psychology. Applicants are responsible for contacting faculty with compatible interests to arrange sponsorship. In addition to sponsorship, the following minimal requirements must be fulfilled:

- 1. Minimum combined score of 1100 on the verbal and quantitative sections of the GRE;
- 2. Undergraduate GPA of 3.0;
- 3. B.A. or B.S. degrees in psychology are not required. Nevertheless, prior to admission, students must have received a grade of B or better or the equivalent in the following undergraduate courses:
 - Introduction to Statistics
 - Experimental Psychology
 - History and Systems of Psychology and three of the following seven courses:
 - Physiological Psychology
 - Learning, Sensation and Perception
 - Personality
 - Social Psychology
 - Developmental Psychology
 - Abnormal Psychology
 - Cognitive Psychology.

Admissions for fall and winter semesters only. Application deadline is March 1 for the fall semester and October 15 for the winter semester.

Suggested Compatible Co-disciplines

Education, urban leadership and policy studies in education, public affairs and administration, sociology and political science.

Core Program Requirements

The following are minimum requirements for students with psychology as their coordinating-unit discipline:

- 1. Psychology 515 Advanced History and Systems of Psychology;
- 12 hours of coursework in statistics and research methodology (e.g., Psychology 516, 517, 601, and 580C [Applied Research Methods]);
- 3. 9 hours of coursework in general breadth areas of psychology (e.g., Psychology 504, 505, 507, 512, 518, 522, 523, 533, 611).

The following are minimum requirements for students with psychology as their co-discipline:

- 1. Psychology 515 Advanced History and Systems of Psychology;
- 2. Psychology 516 Advanced Quantitative Methods (or approved equivalent);
- 6 additional hours of coursework in statistics and research methodology (e.g., Psychology 517, 601, or 580C [Applied Research Methods]);
- 4. 6 hours of coursework in general breadth areas of psychology (e.g., Psychology 504, 505, 507, 512, 518, 522, 523, 533, 611).

Psychology as the coordinating-unit discipline requires a minimum of 54 total hours (including research and dissertation hours). Psychology as the co-discipline requires a minimum of 36 total hours. These will normally be taken in psychology, but the student's supervisory committee may, at its discretion, include courses from related disciplines if this fosters the integrity of the program. If the supervisory committee feels that more than 6 hours outside of psychology are appropriate, approval of the Psychology Interdisciplinary Ph.D. Committee will be required. The Department of Psychology expects its Interdisciplinary Ph.D. students to complete a program of approximately 90 credit hours, including the combined hours from both disciplines.

Other Discipline-Specific Special Requirements

Prior to and independent of their dissertation, Interdisciplinary Ph.D. students with psychology as a coordinating or co-discipline must complete a piece of work of a psychological nature judged by their supervisory committee to be of a publishable quality.

Comprehensive Examination Guidelines

The comprehensive examination will be designed by the student's supervisory committee to demonstrate proficiency in psychological principles and their relationship to the student's co-discipline(s). A wide range of formats is acceptable for the comprehensive examination. For example, in lieu of a traditional essay exam, a student, with the approval of his or her supervisory committee, may choose to conduct an independent investigation of an approved topic within the student's area(s) of interest that results in the preparation of a publishable paper adhering to the format of *Psychological Bulletin* or *Psychological Review*. Comprehensive examinations may be integrated with those in other disciplines.

Public Affairs and Administration

Discipline Coordinator

Nick Peroff, (816) 235-2341, peroffn@umkc.edu

Doctoral Faculty Participation

Gregory Arling Lee Bolman Nancy Day Vine Deloria, Jr. (A) O. Homer Erekson Richard Heimovics Robert Herman Kant Patel (A) (D) Nicholas Peroff Roger Pick David O. Renz Max J. Skidmore (D) Joseph F. Singer Robyne Turner Sidne Ward

Public Affairs and Administration is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Due to course sequencing, the doctoral faculty committee in this discipline will ordinarily only consider applications for admission for the fall term. To have their credentials included in the review process, applicants should submit GRE scores and all other necessary supporting documentation no later than February 15.

The Public Affairs and Administration (PAA) discipline in the Interdisciplinary Ph.D. program is designed to prepare students for research careers in universities, public and nonprofit agencies, or for other roles in which research training is needed. Successful applicants must show evidence of a strong interest in and ability to successfully engage in research, and when appropriate, exhibit promise as skillful teachers. Individuals who earn a Ph.D. in PAA may find positions as faculty members in colleges and universities, or research scientists in public, private or nonprofit organizations. Some graduates have become successful consultants and others hold administrative positions.

The PAA doctoral faculty does not regard research based on large numbers of cases and advanced statistical techniques as the only acceptable form of research. The faculty does expect all Ph.D. students to be competent in quantitative research and to complete an empirical study for the dissertation. The PAA faculty prefers to admit as coordinating discipline students those who have already earned a master's degree. Students with a bachelor's degree who are admitted will be expected to complete the M.P.A. as part of their Ph.D. program.

Applicants are expected to submit scores for the verbal and quantitative portions of the Graduate Record Exmination (GRE). No specific minimum scores are required. Applicants must also submit official transcripts of coursework from all colleges and universities attended. No specific grade-point averages (GPA) are required. Admission is based on an applicant's overall record of academic achievement and the doctoral faculty's judgment of the applicant's likelihood of successfully completing the Ph.D. We expect that those admitted will have scored well on the GRE and have high GPAs, but we prefer to avoid the structures imposed by setting minima.

Applicants should pay particular attention to the narrative statement that accompanies their application. The PAA doctoral faculty gives substantial weight to this statement. It should provide a clear description of the applicant's intellectual interests, how those interests evolved and should desribe the research direction(s) that the applicant intends to pursue. A good statement also discusses the fit between the applicant's interests and the resources available at UMKC (for example, it might identify faculty with whom the applicant hopes to work). Narrative statements need not be limited to one page. Applicants should provide a writing sample (such as a master's thesis or a paper from a graduate seminar) that illustrates writing skills and a potential for scholarly work. Applicants are also encouraged to seek letters of recommendation from people who can address their potential for engaging in scholarly research.

The PAA doctoral faculty seeks to admit only students whose research interests fit the interests and capabilities of the doctoral faculty. We admit only students for whom a member of the doctoral faculty has agreed to serve as interim adviser, and after the student's plan of study is completed, that faculty member should also be willing to serve as the chair of the student's supervisory committee. This commitment from a member of the PAA doctoral faculty applies to all applicants, whether seeking PAA as the coordinating discipline or co-discipline. Those who desire PAA as the coordinating discipline should have at least one additional PAA doctoral member agree to serve as a member of their supervisory comittee, thus, we strongly recommend that applicants communicate with PAA doctoral faculty about their interests and attempt to secure commitments from faculty to serve as adviser or committee member. Since applicants are reviewed beginning in mid-March, applicants should contact faculty by e-mail, telephone or in person before that time.

Suggested Compatible Co-disciplines

Urban leadership and policy studies in education, economics, education, history, psychology, political science and sociology.

Core Program Requirements

For those students with PAA as the coordinating-unit discipline, required courses are:

- PA 510 Introduction to Public Administration Research
- PA 525 Financial Accountability and Policy Development
- PA 526 The Politics of Administration
- PA 530 Public Management
- PA 544 Public Policy Evaluation and Analysis
- PA 548 Leadership for Public Service
- MA 513 Economic Policy & Managerial Control OR BA 501 Economics for Administration

(Previous coursework that is substantially equivalent to any of the above courses may waive one or more of the above requirements.)

- PA 610 Inquiry in Public Administration & Affairs
- PA 620-A Literature of Public Affairs and Administration (emphasizing public administration and public policy)
- PA 620-B Literature of Public Affairs and Administration (emphasizing organizational studies)
- PA 630 Learning in Public Affairs & Administration
- PA 631 Teaching in Public Affairs & Administration
- PA 650 Advanced Research in Public Affairs & Administration (an independent study course for preparing a dissertation proposal)

Two or three courses in statistics and research methods should be selected both in relation to the student's likely dissertation topic and preparation for the student's comprehensive examination (specifically, the portion on statistics and research methods). PA 610, PA 620, PA 650 and the statistics courses are required of all PAA coordinating discipline students. Students must have completed PA 510 (or similar course) recently and obtain consent of the instructor to enroll in PA 610. To enroll in PA 620-A students must have completed PA 525, PA 526 and PA 544 (or similar courses) recently and obtain the consent of the instructor. For PA 620-B students must have completed PA 548 and PA 530 (or similar courses) recently and obtain consent of the instructor. PA 630 and PA 631 may be waived, depending on a student's background and career plans. In addition to the required courses, each student will typically select three or four courses relevant to the student's particular substantive interests (course requirements for the co-discipline will depend on the discipline selected and the student's preparation in that discipline). The exact courses that will constitute each student's plan of study are decided by the student's supervisory committee.

For those students with PAA as a co-discipline, the core requirements are:

- PA 525 Financial Accountability and Policy Development
- PA 526 Politics of Administration
- PA 610 Inquiry in Public Affairs and Administration
- PA 620-A Literature of Public Affairs and Administration (emphasizing public administration and public policy)
- PA 544 Public Policy Evaluation and Analysis
- PA 548 Leadership for Public Service
- PA 620-B Literature of Public Affairs and Administration (emphasizing organizational studies)

Any of the above courses, except PA 610, PA 620-A and PA 620-B, may be waived if a student has had substantially equivalent courses. See the section on coordinating student requirements above for a description of prerequisite courses for PA 610, 620-A and 620-B. Consult with your PAA adviser and course instructor to discuss prerequisites. Typically co-discipline students are expected to complete a minimum of four public adminsitration courses, though many may be expected to complete more than four courses.

Other Discipline-Specific Special Requirements

Dissertation

To successfully complete the Ph.D. program, each student must write a dissertation based on empirical research that constitutes a contribution to knowledge. Students with PAA as their coordinating discipline are expected to write dissertations that include some consideration of public management or public policy issues. The minimum number of hours for a doctoral dissertation with PAA as the coordinating discipline is 12, though some committees may require more.

Comprehensive Examination Guidelines

The examination for PAA coordinating discipline students consists of five areas:

- 1. Public administration and policy analysis;
- 2. Organization studies;
- 3. Inquiry, research methods and statistics;
- 4. A specialized substantive area; and
- 5. The co-discipline exam.

The first three areas are "common," that is, each student takes the same exam. The specialized area is individualized for each student and the co-discpline exam is conducted by each student's co-discipline faculty. Guidelines about preparing for the comprehensive examinations in organization studies and inquiry, methods and statistics are available. Ask your adviser for copies.

The examination for students with PAA as their co-discipline consists of two areas:

- 1. Public administration and policy analysis; and
- 2. Organization studies.

The PAA examination is specialized for each student by PAA members of his or her committee and is assessed by the committee.

Religious Studies

Discipline Coordinator

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Doctoral Faculty Participation

Virginia Blanton (D) J. Bradley Chance (A) Joseph E. Coleson (A) Douglas Cowan Gary L. Ebersole Robert S. Gall (A) Carla L. Klausner (D) Bryan LeBeau William S. Lyon Molly T. Marshall (A) Donald Matthews David M. May (A) Craig Prentiss (A) Harold E. Raser (A) Jeffrey A. Rydberg-Cox Howard Schwartz (A) George Williams (D)

Religious Studies is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. **Note:** The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Generally, students who select religious studies as a discipline must begin their work during the fall semester. Applications received by February 15 will be eligible for fellowship and scholarship consideration. Applications received after that date will be considered on a rolling basis. Except in very special situations, applications that are incomplete as of April 1 will not be considered until the following year.

In addition to the general admission criteria required of all applicants, those who choose religious studies as their coordinating discipline must:

- 1. Possess a master's degree in religious studies or theology, or a master's degree in any of the disciplines of the humanities or social sciences (under certain conditions, a master of divinity degree is acceptable);
- 2. Have earned a grade-point average of 3.5 in graduate courses.

Students who choose religious studies as a co-discipline must meet the criteria for admission specified by the School of Graduate Studies and should have some academic experience in religious studies or career experience related to religion. All applicants must submit:

- 1. One or more samples of written work;
- 2. A brief statement of academic and professional goals;
- 3. A one- or two-page proposal outlining an interdisciplinary plan of study that tentatively specifies a dissertation topic or area of specialization.

Applicants are advised that meeting the criteria of the School of Graduate Studies and the discipline does not automatically result in admission to the Interdisciplinary Ph.D. program. When making recommendations to the School of Graduate Studies, the discipline's faculty steering committee considers other factors as well, particularly the availability of faculty qualified to work in the applicant's area of interest, and the existence locally of necessary archival and library facilities.

Provisional Admission

Applicants who do not meet the requirements specified above may be recommended for provisional admission by the Religious Studies faculty. An applicant admitted provisionally will receive notification of deficiencies and of the conditions which must be met before full admission will be granted.

Suggested Compatible Co-disciplines

Education, English, history, art history, political science, health psychology and sociology.

Core Program Requirements

The total number of courses and credits on the plan of study will vary depending on the student's degree of preparation prior to admission. All students are urged to take coursework in comparative studies of religion, as well as in cognate fields.

The core program requirement for a student whose coordinating-unit discipline is religious studies includes a minimum of 18 hours of coursework in religious studies, including the four core courses listed below, plus coursework in the student's co-discipline(s) [not to exceed 60 percent of the total coursework on the plan of study], and at least 12 dissertation credits.

Core Courses:

- 510 Religions of the World (3 credit hours)
- 584RS Sacred Narratives and Texts (3 credit hours)
 586RS Methodological Approaches to the Study of
- Religion (3 credit hours)
 680RS Doctoral Colloquium (3 credit hours)

The discipline's core requirement for a student whose co-discipline is religious studies includes 510, 584RS, 586RS, and 680RS, plus other courses recommended by the religious studies member(s) of the student's supervisory committee.

The student whose dissertation will have a theological or philosophical focus may be required to take the following course offered by Nazarene Theological Seminary, or its equivalent: Religious Studies 585 - Theological Method and Research (3 credit hours).

Students who have taken any of the three required 500-level core courses prior to admission may substitute other courses approved by their supervisory committee to satisfy the core course requirement. Graduate courses offered by other area institutions that have been approved by the student's supervisory committee may also be used to fulfill the core course requirements in religious studies.

Other Discipline-Specific Special Requirements

Foreign Language Requirements

All students with religious studies as either coordinating or co-discipline and whose dissertation requires work in foreign language sources must demonstrate the requisite language competency through a special examination approved by the student's supervisory committee or an alternative demonstration of competency. In addition, all Ph.D. students must demonstrate a reading ability in either French or German.

Requirements for Retention

A doctoral student with religious studies as a discipline must maintain a 3.0 (B) grade-point average in each semester of coursework taken. A student whose term GPA falls below 3.0, or whose work is deemed unsatisfactory by his or her supervisory committee, may be placed on probation for one semester. A person receiving an F grade in a class normally will not be retained in the doctoral program.

Comprehensive Examination Guidelines

The student with religious studies as his or her coordinating discipline must take three comprehensive examinations in religious studies containing both a written and an oral component, plus an examination set by the co-discipline. The three religious studies examinations are: history and methods of the study of religion, comparative studies of religion and special area. A student's special area may be defined by religious tradition (e.g., Christianity, Judaism, Buddhism) or by geographical area (e.g., American religious history, religions of Africa, Chinese religions). The content of the comprehensive examinations will be determined by the student's supervisory committee and will vary somewhat according to the religious studies component of the student's plan of study. Students will be provided with the requirements for the comprehensive examinations at the time of admission to the Ph.D. program. Students who have religious studies as the co-discipline will take two comprehensive examinations: History and Methods of the Study of Religion and Comparative Studies of Religion. Complete information on comprehensive exams, including previous exam questions, may be found on the Religious Studies Web site.

Interdisciplinarity

Religious studies is an interdisciplinary, cross-cultural and comparative field of study. All students are expected to take coursework in a variety of traditional disciplines and to integrate the knowledge and methodological approaches used in these disciplines in their own research and writing during their graduate career and in the dissertation.

Social Sciences Consortium: Economics, Political Science and Sociology

Discipline Coordinator

James Sturgeon, (816) 235-2837, sturgeonj@umkc.edu

Doctoral Faculty Participation

See the individual entries for economics, political science and sociology.

Social Sciences Consortium is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

The Social Sciences Consortium is only available as a co-discipline option, not as a coordinating-unit discipline. Each participant in the consortium, economics, political science and sociology, is fully involved, as a discipline, in the Interdisciplinary Ph.D. program, with discipline-specific criteria for admission and core program requirements. In addition, however, these three disciplines have developed a special co-discipline option that blends elements of economics, political science, and sociology for students who desire a broader interdisciplinary approach to their doctoral studies.

Recommendations for admission are made by a committee of doctoral faculty (from the three disciplines) which reviews all applications. After admission, the faculty committee aids in the formation of each student's supervisory committee.

Suggested Compatible, Coordinating Discipline

Economics, education, geosciences (with a geography focus), history, political science, psychology, public affairs and administration, sociology, and urban leadership and policy studies in education.

Core Program Requirements

Students admitted with this combination of social science areas as their co-disciplines will normally take at least one doctoral-level core course in each of the three participating social science disciplines, plus two 3-hour interdisciplinary social science courses. One of these interdisciplinary courses, SocSc 610 Philosophy of Social Science, is taken early in the students' programs, and the other, SocSc 620 Seminar in Social Theory and Policy Analysis, is taken near the end of the students' programs to provide a capstone to the co-disciplines and a place to begin designing and polishing the students' research proposals for their dissertations. The discipline-specific, doctoral-level core courses are:

- ECON 688 Colloquium on Political Economy (Econ 551 Advanced Institutional Theory may be substituted)
- POLSC 680 Traditions, Theories, and Trends in Political Science
- SOC 503 Controversies in Contemporary Social Theory and Practice

Students with economics, political science or sociology as their coordinating-unit discipline may substitute a course from one of the other two disciplines or from history in place of the doctoral-level core course from their coordinating-unit discipline. The total minimum co-discipline core requirement is 15 credit hours (five courses).

Sociology

Graduate Program Coordinator

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Doctoral Faculty Participation

Leanne Alarid	Alex Holsinger
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Louise Arnold (A)	Shannon M. Jackson
Barbara Bonnekessen (A)	Kenneth J. Novak
Linda M. Breytspraak	Philip Olson
C. Neil Bull	Tanya Price
Cathleen Burnett	Peter Singelmann
Dana Collins	Deborah B. Smith
Douglas E. Cowan	

Sociology is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies. Note: The discipline-specific requirements listed here are in addition to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission

and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirement

In addition to the general criteria for admission, applicants selecting sociology as their coordinating discipline must have an M.A. or M.S. in sociology or in a related discipline. Additionally, applicants must submit samples of written work and a preliminary proposal for their interdisciplinary plan of study (e.g., intended co-discipline, academic emphasis areas within sociology, intended dissertation research area). Applicants must also have three written recommendations from professors or practitioners in the field sent to the Admissions Office. Applicants must have a GPA of 3.0 or above in their M.A./M.S. program.

Applicants who designate sociology as a co-discipline must submit samples of written work and a brief statement (no more than three pages) indicating a preliminary proposal for their interdisciplinary plan of study (e.g., intended coordinating discipline, academic emphasis areas, intended dissertation research area). This statement should address how sociological studies will contribute to achievement of their academic and professional goals.

Applicants selecting sociology as either their coordinating unit or their co-discipline will be considered for admission only for the fall term. The deadline for receipt of completed applications and supporting documents is February 1. Admissions recommendations will be made by March 15. It

should be understood that meeting the minimum admissions requirements is not a guarantee of admission. Applicants must be matched to faculty resources since doctoral supervision represents a substantial commitment on the part of faculty. Applicants are strongly encouraged to talk with one or more department faculty during the application process.

Alternate Admission Criteria

Applicants not meeting the minimum admission requirements nor having sufficient academic preparation (as listed in the following section) may be considered for provisional admission by the department if the faculty sees high potential for advanced work from the other credentials of the applicant. Evidence of high potential might be pertinent work or research experience, published papers or extremely high achievements in other criterion areas for admission. In any case, the required GPA must be 3.0 or higher in the M.A./M.S. program.

Qualifying Requirements for Full Admission

Prerequisites for full admission include prior graduate courses in the following core areas:

- Classical Social Theory;
- 20th Century Social Theory;
- Qualitative Research Methods;
- Quantitative Research Methods;
- Intermediate Statistics; •
- M.A./M.S. thesis or a research project/report (SOC 595, 6 additional credit hours).

Provisional admission for candidates who have not yet met these requirements will be changed to full admission when a candidate passes each of these courses with a B (3.0) or higher.

Suggested Compatible Co-disciplines

English, history, art history, philosophy, religious studies, economics, political science, women's studies, social science consortium, psychology, public administration, urban leadership and policy studies and nursing.

Core Program Requirements

Sociology as the Coordinating Discipline

A plan of study will be developed in consultation with the advisory committee. The following should be understood as minimum requirements. Other additional course work may be necessary to prepare the student for the dissertation research area.

Students with sociology as the coordinating unit are required to take the following courses (18 credit hours):

- 1. Sociology core courses (9 hours):
 - SOC 503 Controversies in Contemporary Social Theory and Practice;
 - SOC 506 Colloquium: Research and Dissertation Project;
 - PSYCH 517 Multiple Regression and Multivariate Analysis. Prerequisite: SOC 516.
- 2. Minimum of 9 hours of substantive, graduate-level sociology courses related to their plan of research.

Sociology as a Co-discipline

Those students with sociology as a co-discipline will take a minimum of 15 hours in sociology. Prior to full admission they will have been expected to have taken, and passed with a minimum of 3.0, the following courses:

- SOC 501 Social Theory I (3 hours);
- SOC 502 Social Theory II (3 hours). These two required courses are included in the 15 required hours in sociology.

Other Discipline-Specific Requirements

Students are expected to maintain a GPA of 3.0 or higher in their coursework within the Ph.D. program. If the GPA falls below this level, students will be on probation and have one semester to raise their GPA to 3.0 or above.

Comprehensive Examination Guidelines

Students with sociology as their *coordinating discipline* must successfully complete a comprehensive written and oral examination in the following areas: (1) social theory, (2) research methods/statistics, (3) one substantive area of choice. Students must complete these examinations after having taken the required number of course hours in their coordinating and co-discipline and before enrolling in the 12 hours of dissertation research.

Students with sociology as a *co-discipline* must successfully complete 3 hours of comprehensive written examination within a substantive area of sociology elected in the program of study.

All comprehensive examinations must have an interdisciplinary dimension in which students will be expected to demonstrate their ability to integrate and apply the perspetives of both disciplines to social problems.

Software Architecture

Discipline Coordinator

Ê. K. Park, (816) 235-1497, ekpark@umkc.edu

Doctoral Faculty Participation

occording a declarge and patients	
Yijie Han	Eun K. Park
Yugyung Lee	Jerrold F. Stach (D)

Software Architecture is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

A student who meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program. A student who does not meet some of the requirements but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of student's interest, the quality of previous work, etc. A student not qualifying for admission to the Ph.D. program may be considered for admission to the M.S. computer science program. Requirements for admission are the same whether the applicant is requesting software architecture as the coordinating-unit discipline or co-discipline.

Academic Preparation

The applicant must have a bachelor's degree and/or a master's degree in computer science, computer engineering, electronics, communications engineering, or any other field requiring substantial training in at least one of the above fields and in mathematics with a GPA of 3.5 or better, cumulative as well as in the major field; and a GPA of 3.5 or better in all post-baccalaureate or post-master's degree work.

Aptitude for Advanced Work

The student must demonstrate an aptitude for advanced-level work through national/international standardized examinations such as GRE. The expected performance level is the 85th percentile in the quantitative portion of the GRE examination.

Proficiency in English

The student must demonstrate his or her proficiency in oral and written communication in English through national/ international standardized English examinations such as TOEFL, verbal portion of the GRE, etc. The expected proficiency level is the 50th percentile in the verbal portion of the GRE or a TOEFL score of 570 (230 CBT). UMKC students may also satisfy this requirement by obtaining an English Proficiency Certification from the English Department. [Note: As per University policy, all international students are tested for proficiency in English upon arrival on campus, regardless of their scores in TOEFL or verbal portion of GRE or any other test. A student's adviser may also require the student to take the above test, irrespective of the student's native language. As a result of this test, the student may be required to improve his or her oral and written communication in English before enrollment in the courses of the chosen disciplines.]

Recommendations

The student must provide at least three recommendation letters from the professors from his or her previous institution(s). If the applicant has been out of school for several years, recommendation letters from his or her supervisors (technical) will be acceptable. A recommendation from a UMKC Computer Science and Electrical Engineering (CSEE) Division faculty member must be provided if the student has taken courses from or worked with the CSEE faculty.

Statement of Goals and Objectives

The applicant must provide a 250- to 500-word essay on his or her goals and objectives of pursuing the Ph.D. in the chosen fields.

Admission at an Advanced Level

An applicant who has already completed significant graduate coursework (15 or more semester hours of the post-master's work or 30 or more hours of the post-bachelor's work) toward a Ph.D. at another institution, must provide reasons for changing institutions. The applicant must also provide a letter of endorsement from a software architecture department's doctoral faculty member indicating willingness to be the student's research adviser.

Alternate Admission Criteria

The applicant may have received a bachelor's degree or a master's degree in computer science, computer engineering, electrical engineering or electronics, or any other related field with substantial training in mathematics. An applicant not meeting the minimum admission requirements, or not having sufficient academic preparation (stated below under prerequisite knowledge) for advanced work in the chosen discipline(s), may be considered for provisional admission by the CSEE Division's Ph.D. committee if the committee sees high potential for advanced work from the rest of the applicant's credentials. Evidence of high potential might be pertinent work experience, published papers or extremely high achievement in related areas. In any case, the required GPA (or GPAs) must be at least 3.0 and the coursework deficiencies in software architecture must not be more than 18 semester hours. Applicants with an established research or publication record in a quantitative science are encouraged to apply to this discipline.

Qualifying Requirements for Full Admission

Prerequisite Knowledge

A Ph.D. student selecting software architecture as a discipline is expected to have the level of preparation represented by the following courses before attempting advanced study:

- Computer Science: CS 291, CS 352, CS 431, CS 441, CS 451, CS 470, CS 481.
- Mathematics: MATH 300.

Length of Time to Complete Qualifying Requirements When a student is admitted provisionally, the SICE Ph.D. Committee will specify, and the UMKC Interdisciplinary Executive Committee will confirm, the conditions and length

of time available to satisfy conditions to achieve regular-admission status.

Suggested Compatible Co-disciplines

Computer networking, telecommunications networking, mathematics, physics, chemistry (computational focus) and engineering (electrical and mechanical focus).

Core Program Requirements

The amount of work required for the Ph.D. depends on the student's level of preparation. For example, a student entering the Ph.D. program after earning a bachelor's degree may expect to do significantly more work compared to the student who enters after earning a master's degree.

Qualifying and Comprehensive Examination Guidelines

The Qualifying Exam is administered by the CSEE Division's Ph.D. committee. The exam is a writtem exam and the questions are from fundamental courses (up to 300 level) and 400-level discipline specific courses.

The Comprehensive Exam is administered by the doctoral committee of the candidate. The exam is a writtem exam and the questions are from both coordinating unit and the co-discipline for each candidate.

The candidates should contact the CSEE Division office and the chair of their doctoral committee for more information.

Software Architecture as a Co-Discipline

The student who chooses software architecture as a co-discipline may obtain information on qualifying exam and comprehensive exam requirements from the discipline coordinator.

Financial Aid

Various forms of financial aid are available through the School of Interdisciplinary Computing and Engineering and the Graduate School. Please contact the discipline coordinator for more information.

Doctoral Faculty in the Discipline and Research Interests

Please visit the SICE homepage at http://www.sice.umkc.edu or talk to the discipline coordinator for more detailed and up-to-date information.

Telecommunications Networking

Discipline Coordinator

Khosrow Sohraby, (816) 235-2361, sohrabyk@umkc.edu

Doctoral Faculty Participation

Lein Harn (D)	Jerry Place
Vijay Kumar (D)	Khosrow Sohraby
Kenneth Mitchell	Appie van de Liefvoort (D)
Nihat Cem Oguz	

Telecommunications Networking is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

A student who meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program. A student who does not meet some of the requirements but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of student's interest, the quality of previous work, etc. A student not qualifying for admission to the Ph.D. program may be considered for admission to the M.S. computer science program. Requirements for admission are the same whether the applicant is requesting telecommunications as the coordinating-unit discipline or co-discipline.

Academic Preparation

The applicant must have a bachelor's degree and/or a master's degree in computer science, computer engineering, electronics, communications engineering, or any other field requiring substantial training in at least one of the above fields and in mathematics with a GPA of 3.5 or better, cumulative as well as in the major field; and a GPA of 3.5 or better in all post-baccalaureate or post-master's degree work.

Aptitude for Advanced Work

The student must demonstrate an aptitude for advanced-level work through national/international standardized examinations such as GRE. The expected performance level is the 85th percentile in the quantitative portion of the GRE examination.

Proficiency in English

The student must demonstrate his or her proficiency in oral and written communication in English through national/ international standardized English examinations such as TOEFL, verbal portion of the GRE, etc. The expected proficiency level is the 50th percentile in the verbal portion of the GRE or a TOEFL score of 570 (230 CBT). UMKC students may also satisfy this requirement by obtaining an English Proficiency Certification from the English Department. [Note: As per University policy, all international students are tested for proficiency in English upon arrival on campus, irrespective of their scores in TOEFL or verbal portion of GRE, or any other test. A student's adviser may also require the student to take the above test, irrespective of the student's native language. As a result of this test, the student may be required to improve his or her oral and written communication in English before enrollment in the courses of the chosen disciplines.]

Recommendations

The student must provide at least two, but preferably three, recommendation letters from the professors from his or her previous institution(s). If the applicant has been out of school for several years, recommendation letters from his or her supervisors (technical) will be acceptable. A recommendation from a UMKC Computer Science and Electrical Engineering (CSEE) Division faculty member must be provided if the student has taken courses from or worked with the CSEE faculty.

Statement of Goals and Objectives

The applicant must provide a 250- to 500-word essay on his or her goals and objectives of pursuing the Ph.D. in the chosen fields.

Admission at an Advanced Level

An applicant who has already completed significant graduate coursework (15 or more semester hours of the post-master's work or 30 or more hours of the post-bachelor's work) toward a Ph.D. at another institution must provide reasons for changing institutions. The applicant must also provide a letter of endorsement from a SICE faculty indicating willingness to be the student's research adviser.

Alternate Admission Criteria

An applicant not meeting the minimum admission requirements nor having sufficient academic preparation (stated below under "prerequisite knowledge") for advanced work in the chosen discipline(s) may be considered for provisional admission by the CSEE Division's Ph.D. committee if the committee sees high potential for advanced work from the rest of the applicant's credentials. Evidence of high potential might be pertinent work experience, published papers or extremely high achievement in another criterion area. In any case, the required GPA (or GPAs) must be at least 3.0 and the coursework deficiencies in the applicant's chosen CSTP discipline must not be more than 18 semester hours.

Qualifying Requirements for Full Admission

Prerequisite Knowledge

A Ph.D. student selecting telecommunications as a discipline is expected to have the level of preparation represented by the following courses before attempting advanced study:

- Computer Science: CS 291, CS 311, CS 481, CS 394R.
- Mathematics: MATH 250, MATH 345.
- Physics: PHYS 250.

Length of Time to Complete Qualifying Requirements When a student is admitted provisionally, the conditions and the maximum period for conditions to be satisfied for the change of status to regular admission will be specified by the SICE Ph.D. committee, and confirmed by the UMKC Interidisciplinary Ph.D. executive committee, at the time of provisional admission.

Suggested Compatible Co-disciplines

Computer networking, mathematics, software architecture, physics, chemistry and engineering.

Core Program Requirements

The amount of work required for the Ph.D. depends on the student's level of preparation. For example, a student entering the Ph.D. program after earning a bachelor's degree may expect to do significantly more work compared to a student who enters after earning a master's degree.

Qualifying and Comprehensive Examination Guidelines

The Qualifying Exam is administered by the CSEE Division's Ph.D. committee. The exam is a writtem exam and the questions are from fundamental courses (up to 300 level) and 400-level discipline specific courses.

The Comprehensive Exam is administered by the doctoral committee of the candidate. The exam is a writtem exam and the questions are from both the coordinating unit and the co-discipline for each candidate.

The candidates should contact the CSEE Division office and the chair of their doctoral committee for more information.

Urban Leadership and Policy Studies in Education

Discipline Coordinator

Stuart McAninch, (816) 235-2446, mcaninchs@umkc.edu

Doctoral Faculty Participation

Loyce Caruthers
Donna M. Davis
Eugene Eubanks (E)
Joan V. Gallos
Larry Gregg
Bruce A. Jones

Stuart A. McAninch Richard Palm (E) Dianne Smith (D) Carolyn J. Thompson Sue C. Thompson

Urban Leadership and Policy Studies in Education is a discipline in the Interdisciplinary Ph.D. program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements earlier in this section.

Discipline-Specific Admission Requirements

Applicants who designate urban leadership and policy studies in education as their coordinating unit will be expected to have a grade-point average of at least 2.75 (on a 4.0 scale), covering all college work taken prior to the bachelor's degree, or a GPA of at least 3.5, covering all post-baccalaureate work completed to date. Applications are normally only reviewed once a year, for admission beginning with the next summer or fall term. To be considered, applications must be submitted to the Admissions Office by February 15. All required application documentation must be received by March 1.

The applicant must provide the following supplementary documentation:

- 1. Written recommendations from appropriate professors and practitioners in the field (selected by the applicant);
- 2. An autobiographical sketch. (This should be a brief resume of academic and professional goals and the applicant's personal, academic and career history as it relates to those goals. It should also include reasons for choosing urban leadership and policy studies in education as a field of study.);
- 3. Evidence of graduate-level writing ability provided by writing samples, prior scholarly writing, or the successful completion of an essay examination.

In addition, an applicant, the applicant's adviser or any member of the division may request that the applicant meet with and be interviewed by the division faculty.

Alternate Admission Criteria

Applicants whose admissions profiles do not satisfy the Ph.D. general criteria, but whose aggregate GRE score on all three sections is at least 1200, will be considered for recommendation for admission based on an evaluation of the above objective and subjective information, plus a variety of additional factors such as demonstrated leadership skills, commitment to education, communication skills, a clear and important research agenda, cultural background, etc.

International applicants will be considered for admission to the Ph.D. program on the basis of background, experience and educational attainments in their home countries. Exceptions to the general criteria for admission to Interdisciplinary Ph.D. study may be made for students whose potential for success in the doctoral program may not be reflected in the general criteria.

Qualifying Requirements for Full Admission

In some cases, the division may ask that 12 hours of work at UMKC, including an education foundations course, be taken prior to full admission.

Students admitted under alternate criteria will be notified upon acceptance of any coursework deficiencies they must satisfy or other preparation they must undertake prior to full admission.

Suggested Compatible Co-disciplines

Education, public affairs and administration, history, economics, political science, the social science consortium and sociology.

Core Program Requirements

Students with urban leadership and policy studies in education as a co-discipline will be required to take a minimum of 15 credit hours of core courses. The core curricula will vary, depending on whether students' research is primarily in educational leadership or the social-philosophical foundations of education and on the types of educational setting upon which they wish to focus. Specific courses will be selected with the advice and consent of the student's faculty adviser and supervisory committee. The supervisory committee may elect to accept coursework in an educational-specialist program or other post-master's degree program as counting toward the 15 credit-hour requirement.

Students seeking administrative certification for public school positions should check with their advisers to be sure they include all courses currently required in the states in which they wish to become certified.

The amount of required coursework, beyond the minimum 15 credit-hour core requirement, taken by students with urban leadership and policy studies in education as their coordinating-unit discipline, will depend upon their previous preparation in the discipline, their previous research competencies, their personal career goals, and their research interests.

All students with urban leadership and policy studies in education as either the coordinating-unit discipline or the co-discipline are required to take and complete EDUL 685, the seminar on problems and issues in education and urban leadership.

Other Discipline-Specific Special Requirements

The student, at a minimum, will be required to take and complete 12 hours of coursework that provides extensive preparation in research methodologies relevant to her or his professional goals and intended dissertation project. The student will select specific courses with the advice and consent of her or his faculty adviser and supervisory committee. Typical courses which would satisfy this requirement include (but are not limited to): EDRP 505, EDRP 508, EDRP 605, EDRP 608, EDRP 610, Hist 591, Hist 687, Soc 510, Soc 511, Soc 512, and EDCI 589QR.

Comprehensive Examination Guidelines

Students with urban leadership and policy studies in education as the coordinating-unit discipline must pass a comprehensive examination including both the coordinating-unit discipline and the co-discipline areas.

School of Graduate Studies Courses

590A Special Topics (1).590B Special Topics (1).590C Special Topics (1).

School of Law

University of Missouri-Kansas City 500 E. 52nd Street (816) 235-**1644** Fax: (816) 235-**5276** law@umkc.edu http://www.umkc.edu/law

Mailing Address

University of Missouri-Kansas City School of Law 5100 Rockhill Road Kansas City, MO 64110-2499

Interim Dean: Jeffrey B. Berman Interim Associate Dean: Ellen Y. Suni Assistant Dean for Student Services: Matthew R. Davis

General Information

This catalog covers the academic programs of the School of Law. Prospective students should be aware that the School reserves the right to make changes in admission requirements and other specifications in the catalog. All statements in this publication are announcements of present policies only and are subject to change at any time without prior notice. They are not to be regarded as offers to contract.

History

In 1895, three young lawyers with energy and vision, William P. Borland, Edward D. Ellison and Elmer N. Powell, founded the Kansas City School of Law with the active assistance of leading members of the bench and bar. Borland, the first dean of the school, was elected to Congress in 1910 and was succeeded by Ellison, who served as dean until the School of Law merged with the University of Kansas City in 1938. After affiliation with the University of Missouri System in 1963, the school assumed its present name as the University of Missouri-Kansas City School of Law.

Accreditation

The school is accredited by the American Bar Association and is a member of the Association of American Law Schools.

Academic and Professional Training at UMKC

UMKC School of Law provides academic and professional training to students seeking careers in law. Our faculty are outstanding scholars who have extensive practice experience. Faculty at UMKC are actively engaged with students both inside and outside the classroom. Our classes are relatively small (by law school standards) and many of our substantive courses incorporate simulations and service learning opportunities. Our faculty and students are collegial and the school provides many opportunities for interaction and development of close personal relationships that will last throughout one's career. We like to think of ourselves as the urban, public law school with the small, liberal arts feel.

We are a law school that teaches students to become lawyers in the best tradition of the profession and introduces them to the opportunities and obligations of the legal profession and its role in the greater community. We appreciate the work of lawyers and their many contributions, which include educating people and institutions about their rights, helping to design prosperous business and community ventures, and working towards the effective and efficient resolution of disputes. We maintain a faculty devoted both to professional service and to advancing knowledge through the production of excellent academic scholarship.

UMKC School of Law is a community of scholars, faculty and students working together, to address the legal issues and problems confronting society today on the local, state, federal, and international levels. Because we train many of the region's practitioners, business people, judges, and politicians, we have a special responsibility to see that they are competent members of the bench and bar, advisors and administrators; technically proficient, professionally responsible, and knowledgeable about the range of social, political, and economic ideas that influence our society. In doing so, we are aware that our graduates must be comfortable in a variety of professional settings with people from a variety of experiences, from land-use planning meetings with the local town council to trade negotiations in Mexico City, from an opening statement in the county courthouse to an appellate argument before the Eighth Circuit Court of Appeals. While the details of such settings change over time, we can prepare students for such varied work by concentrating always on the foundations of good lawyering: respect for people, respect for knowledge and ideas, and respect for justice.

As a Law School, we build on a strong tradition of advocacy, civic engagement, and academic excellence - a program that has not only produced some of the region's best lawyers and judges, but one that has also trained a U.S. Supreme Court Justice (Charles Whittaker) and an American President (Harry Truman). We embrace and foster a collegial, collaborative model of professional education and maintain an intellectual and cultural environment that fosters broad thinking, local and global awareness, and creative problem-solving.

Law Building

Nestled among giant oak trees on the corner of 52nd and Oak streets, in the center of Kansas City and at the center of the nation, is the home of the UMKC School of Law. Among the unique features of this building are office suites shared by faculty and students. The school continues to take great pride in its efforts to foster faculty-student interaction. One ongoing initiative involves assigning many second- and third-year students to offices located within suites that also house their professors' offices. This "intellectual migration" was designed to foster the exchange of ideas and more generally to promote collegiality between faculty and students. Additionally, lounges or conference rooms within the suites provide opportunities for both formal and informal meetings of students and faculty.

The school has more than 121,000 square feet of modern, usable space, including classrooms equipped with Internet-connected teaching workstations with audiovisual and video conferencing capabilities. The E.E. "Tom" Thompson Courtroom, located on the ground floor, is equipped with audiovisual equipment used to augment the advocacy training program of the school. Auxiliary rooms allow for live trials and hearings of the many area courts and agencies in its courtroom and a unique viewing theatre above the courtroom allows for real-time commentary on court proceedings. A spacious student commons area, including the Truman Terrace (a scenic outdoor courtyard filled with tables, benches and fountains) and a vending area is located near classrooms. Offices for many student organizations are located near the student commons area as well.

Wireless Technology Environment

The School has installed technology in the building which provides freedom from wired connections–enabling students, staff and faculty to access e-mail and multiple databases on the Internet of use to lawyers and law students using personal computers with wireless capability from offices, classrooms, study areas, the suites and the Leon E. Bloch Law Library.

Leon E. Bloch Law Library

Law Library

The Leon E. Bloch Law Library is a comfortable, efficient and user-friendly facility. It contains holdings in all major areas of legal scholarship and practice. It is especially strong in the materials needed by students for law study. Most of the collection is on open shelves, with ample research and study space provided by tables and study carrels.

Electronic Resource Center

Technology has reshaped legal publishing in ways that will forever alter how attorneys and judges approach their work. The information professionals of the Leon E. Bloch Law Library have embraced this transformation in creating a state-of-the art Electronic Resource Center. The center has four major components. The Virtual Law Classroom, comprising 25 Pentium-processor equipped computers, provides a teaching resource for instruction in the use of digital/optical databases; the Internet and World Wide Web; and multiple databases of use to law students and lawyers. When not used as a classroom, these machines are available for library patrons. The Law Student Computing Center provides 15 Pentium-processor equipped computers exclusively reserved for use by law students, including a scanner and a dedicated workstation for the visually impaired. All of the resources available in the Virtual Law Classroom, plus additional law student-related Web sites are also available on these machines. In addition, each law student receives a password necessary for accessing multiple databases and Web sites from home.

Study Spaces in Suites

The design for the school's modern building manifests a commitment to providing desirable spaces for study and interaction by students who live throughout the metropolitan area. Double- or single-occupancy offices are provided to most second-year students, research assistants and teaching assistants. Most third-year students are assigned carrels or space in Club 3L, a communal area for studying or lounging. Library study spaces, far in excess of the number of first-year students, also are available.

The second and third-year assigned spaces are located in suites that include faculty offices. Each suite is named after a distinguished former justice of the United States Supreme Court. This innovative building plan fosters student-faculty interaction, the exchange of ideas and general collegiality.

The concept of the Virtual Law Classroom, located in the Leon E. Bloch Law Library, has been extended to the suites. The Virtual Law Office project provides computers for use by students and faculty in conjunction with specialized programs offered by the School of Law. It allows students and faculty to work together on projects while linked to attorneys and others in the community.

The School of Law in the Metroplex

UMKC takes pride in being the urban law school in the University of Missouri system. From this unique vantage point, faculty and students actively lead and participate in professional activities with greater Kansas City bar associations, continuing legal education programs, lawyers and law firms located in both Kansas and Missouri and the judiciary.

The School of Law community enjoys strong partnerships with many area causes and concerns. A variety of community-based projects, ranging from the rehabilitation of inner-city houses to tax preparation services, receive benefits from this involvement. Students work with faculty on research of value to the community and are often involved in drafting or commenting on pending legislation. The Law School houses and assists the Kansas City Youth Court, a diversion program from juvenile court, where high school students act as lawyers and judges. Faculty, students, staff and alumni volunteers also help introduce inner-city high school students to careers in law.

Graduates of the UMKC School of Law have important responsibilities in legal arenas throughout the city, state and country. From corporate counsel positions in more than 25 national companies to the library of the Supreme Court of the United States, Law School alumni provide distinguished service.

On a local level, the annual listing of "Outstanding Lawyers in the Kansas City Metropolitan Area" names more UMKC alumni than from any other school. In addition, only two women have served as president of the Kansas City Metropolitan Bar Association; both are Law School alumnae. A majority of the active judges of both the United States District Court for the Western District of Missouri and the Missouri Court of Appeals (Western District) are graduates of the School of Law. Circuit benches throughout the multicounty metropolitan area are filled with a predominant number of UMKC alumni.

The Law School is proud of the fine reputation of its alumni and the outstanding contributions they have made and continue to make in both the legal and non-legal communities.

The Law Foundation

The Law Foundation was incorporated in 1959 by outstanding alumni and leading citizens of Missouri, including Harry S. Truman, Charles E. Whittaker, H. Roe Bartle and other judges, lawyers, government officers and friends, to promote and advance the cause of legal education. The Law Foundation is fiscally autonomous, operating with its own board of trustees, but working closely with the School of Law leadership to meet the long- and short-term financial needs of the school. With the support of the Law Foundation, the school is able to sustain and cultivate diverse aspects of a superior education program.

The Law Foundation funds scholarships on an annual basis. In addition, it provides significant financial assistance for student competition participation; faculty recruitment and development; library acquisitions and research materials; technology improvements; and the school's public communications program.

Over the years, the foundation and its many friends have successfully built an endowment of more than \$3 million for the Law School.

Nondiscrimination Policy

The Board of Curators of the University of Missouri and the University of Missouri-Kansas City are committed to the policy that there shall be no discrimination on the basis of race, color, creed, sex, sexual orientation, age, national origin, disability or Vietnam era veteran status. For additional information, see the Statement of Human Rights information included in the Introduction section of this catalog.

Disabled Student Services

The University of Missouri-Kansas City endeavors to make all activities, programs and services accessible to students with disabilities. A campus coordinator for disabled student services is available to advise students and arrange for reasonable accommodations concerning all aspects of campus life. It is important that students contact the coordinator at least six weeks prior to the beginning of classes to arrange appropriate documentation and reasonable accommodations in the classroom. For information call (816) 235-**5696**. Individuals with speech or hearing impairments may use Relay Missouri, 1-800-735-2966 (TT) or 1-800-735-2466 (voice).

Admission to the Bar

Graduation from law school does not guarantee admission to the bar. Each applicant should get information on the character and other qualifications for admission to the bar in the state in which the applicant intends to practice. Information regarding law student registration and bar admissions in Missouri is made available to all first-year students.

Law Alumni Association

The UMKC Law Alumni Association, the primary friend-raising organization for the Law School, was revitalized in 1992 as a division of the university-wide Alumni Association. Its energies are devoted to bridging the passage between student and professional life, encouraging the rewards of service and illustrating a personal commitment to a society based on law and justice. The Law Alumni Association strengthens and extends the educational mission of the Law School.

Annual activities include organizing an all-alumni dinner, with public recognition given to outstanding alumni and faculty; providing assistance to student recruitment, mentoring and advising; assisting with social and professional activities connected to local and state bar associations; offering support to student programs and activities; and more.

Continuing Legal Education

The Office of Continuing Legal Education is the law schools principal contact with the practicing bar and is a nonprofit revenue-generating unit for the University. The CLE office produces domestic educational programs, for-degree-credit and non-credit international summer study abroad programs, national audio conferences, practice manuals, and other educational material designed to promote the competency of the bar and other professions in support of the practice of law. In addition to its CLE activities, the CLE office administers two prizes annually given to UMKC law school students and coordinates adjunct professors and the Advanced Professional Studies program.

UMKC law school students may attend UMKC CLE seminars free of charge. Students may purchase CLE books and other CLE publications for the cost of reproducing the material. Attendance at CLE programs exposes students to practical aspects of law practice and the opportunity for meaningful contact with potential employers.

The CLE office coordinates both for-credit and non-credit study abroad programs. The China and Ireland summer study abroad programs are for-credit courses fully accredited with the American Bar Association. These programs are designed to broaden law students understanding of different legal systems while introducing them to the cultures on which those systems are built. The non-credit travel programs annually offered by the CLE department are to various destinations such as England, Ireland, Russia, Australia, New Zealand and Hawaii. Students and companions may attend these non-credit courses at substantial discounts.

The CLE office administers two law school student scholarship programs that annually provide up to \$5,000 to UMKC law school students. These prizes are The Federal Estate Planning Prize Competition and the Heart of America Tax Institute Prize.

Licensed attorneys and other professionals may register for regularly scheduled law school courses as non-degree seeking students through the Advanced Professional Study program administered by the CLE office. Many of these upper-level, specialized courses are taught by practicing professionals who volunteer their time and expertise to the law school as adjunct professors. The CLE office coordinates the adjunct courses by acting as the liaison between the professors and the students.

Career Services

The Law School Career Services Office helps students and alumni obtain professional employment. Law firms, government agencies, the judiciary and other employers seeking law graduates for permanent positions use this service to hire UMKC School of Law graduates. The office also assists students seeking part-time and summer clerking positions and short-term clerking opportunities. The office maintains a library of employment materials for the use of law students and alumni. Private rooms are available at the Law School for employment interviews.

The CSO provides career counseling to students and alumni as well as advice and assistance in resume preparation and interviewing skills. The office sponsors a series of programs to introduce students to a variety of career opportunities for lawyers and others with the J.D. degree. In addition, CSO actively plans and coordinates the mentor program and co-sponsors an annual Volunteer Fair to provide students with information about service opportunities in the community. CSO also co-sponsors a Mid-America International Law Careers Day that draws national speakers and law students from around the region.

The office works closely with the Public Interest Law Association, which raises funds to provide public-interest law internships to selected law students. These funds, when matched by money from public-interest law organizations, provide stipends for law students entering their second or third years to work in those organizations. UMKC students have been placed through the program to work at the Public Interest Litigation Clinic, the Missouri Public Defender's Office and the Kansas City, Mo., City Attorney's Office, among others.

CSO collaborates with the Kansas City Metropolitan Bar Association's Summer Law Internship Program and Black Law Students Association to introduce minority high school students to the rigors of college life in general and to law school student life specifically.

Career Opportunities

UMKC Law School graduates have a wide variety of job opportunities available. The largest number of them join law firms, ranging in size from one to more than 500 attorneys. Some of these firms specialize in advising corporate clients or solving civil legal problems. Others practice solely criminal defense. Many firms offer a general practice that spans corporate, civil and criminal law; some deal mainly with litigation work, personal injury cases, family law; or copyright, patent and trademark law.

Some law graduates do not want to practice law at all, desiring instead to use their legal skills in the business world as executives, bankers and corporate tax experts. Therefore, corporations, accounting firms, title companies, banks and insurance companies recruit them.

The legal departments of state and municipal government agencies also employ graduates. Prosecutors' offices, public defenders and legal service organizations recruit at the school. Branches of the United States military recruit lawyers for service in the Judge Advocate General's Corps, and federal government agencies, such as the Department of Labor and the Environmental Protection Agency, hire graduates to staff their legal departments. Graduates have taken positions in all of these settings.

Other graduates become law clerks for judges or administrators in law schools. Some become professors of law.

Juris Doctor Degree Admissions

Eligibility for the J.D. Program

To be eligible to apply for admission to the School of Law's Juris Doctor degree program, a person must have either:

- A bachelor's degree based on a program of courses with substantial intellectual content (such as history, English, accounting, philosophy, calculus or chemistry) from an approved institution; or
- Completed at least 90 acceptable hours of credit in courses with substantial intellectual content in an approved institution, completed all non-elective coursework toward a bachelor's degree, and made arrangements with the school that will award the degree to accept Law School credits for the remainder of the work required to earn that degree, so that the student will earn the degree prior to the granting of the J.D. degree.

Criteria for Admission

The School of Law restricts the number of students admitted each year in order to maintain a favorable faculty-student ratio and to provide the best possible legal education for each student enrolled. Because many more people apply to the Law School than there are seats available, admission is competitive.

Students are drawn to the School of Law because of its intellectually stimulating academic environment, vibrant and diverse campus life and interaction with and in the surrounding community. In addition to being highly skilled and ethical attorneys, graduates are expected to leave UMKC able and committed to making a difference in their families, workplaces, communities, organizations and society at large. While substantial weight is given to each applicant's LSAT score and undergraduate GPA, the Law School and its faculty also consider other factors in shaping an entering class. These factors include:

- Advanced or specialized educational achievement demonstrating potential for academic excellence in the study of law;
- Contributions to the cultural diversity of the School of Law;
- A history of overcoming challenges and barriers based on societal discrimination or economic disadvantage;
- Demonstrated leadership qualities;
- A significant and sustained commitment to public or community service;
- Other accomplishments or qualities that indicate the applicant will contribute to the School of Law's academic and service missions.

Admission Process

All applicants are required to submit a completed, signed application form; the application fee; a personal statement; and two letters of recommendation, in addition to the material submitted through the Law School Data Assembly Service (LSDAS). Letters of recommendation may be sent directly to the School of Law or through the LSDAS "Letter of Recommendation" service. Instructions for this service may be found in the LSDAS booklet. Once all materials have been submitted, a file is considered complete and ready for an admission decision to be made.

The Law School makes admission decisions on a rolling admissions basis. That is, decisions are made as files are completed. This process begins in October of the year preceding the academic year applicants are applying for and continues until sufficient admissions are granted to fill the entering class. Accordingly, applications should be submitted as early as possible. A nonrefundable application processing fee of \$50, in the form of a check or money order payable to the University of Missouri-Kansas City, must accompany the application. In addition, a \$200 seat reservation fee must be paid by April 1 or a designated period after admission, whichever is later. The \$200 is nonrefundable but will be credited toward first-semester fees.

LSAT/LSDAS

In order to gain admission, an applicant must take the LSAT. The test may be taken at various locations, including UMKC. It normally should be taken no later than February for purposes of admission for the following fall. Information concerning the test is available online at http://www.lsac.org or by writing to the

Law School Admissions Council (LSAC) Box 2000 Newtown, PA 18940-0998

Applicants also must arrange for evaluation of their college and university transcripts by the LSDAS. Further information and a registration form for this purpose may be obtained at the Web site and mailing address above.

Once the student applies, the school will request a copy of the law school report from LSDAS. Please make sure the report is paid for so there is no delay in transmission.

Prerequisites

No undergraduate courses are specifically required for admission to the Law School. The best preparation is a broad liberal-arts education designed to provide an understanding of the institutions and values with which the law deals and the development of those skills and habits of thought essential to legal reasoning.

Any course of study leading to an undergraduate degree will be sufficient for admission, as long as the emphasis was an intellectually demanding one that challenged the student to employ critical-thinking skills and communicate effectively. Particularly helpful to law school study, however, are courses in history, as rules of law are best understood in terms of the historical milieu in which they were pronounced or enacted. Courses in political science and economics are beneficial, because lawyers must understand the institutions of government and the economic system with which they will be dealing. Courses in speech, logic, debate and the various language arts also are useful, because they expand and sharpen reasoning and communication skills. Courses with a strong emphasis on writing are particularly encouraged in light of the crucial role effective writing plays both in law school and law practice.

Matriculation Options: Full-Time and Part-Time Progress

Most students matriculate on a full-time basis. Some students, however, may do so on a part-time basis.

The ability to proceed part-time is designed for students who are unable to enroll on a full-time basis, e.g. disabled students, or those with family or career responsibilities. These students must enroll in 8 to 9 hours of classes each semester in the first year, and 8 to 12 hours per semester thereafter. In all other respects, students enrolled part-time are required to satisfy all graduation requirements applicable to full-time students, including the requirement that they complete all degree requirements within five years. Part-time students develop programs with the assistant dean for student services that are designed to parallel, as much as possible, the sequence of courses for full-time students. Part-time student eligibility for *Law Review*, *Urban Lawyer*, honors and other activities will parallel, as much as possible, eligibility of full-time students. A full-time student may not become a part-time student without permission of the associate dean. Part-time students may not become full-time students until they have completed all first-year courses, unless they obtain permission to proceed full-time from the associate dean. Once part-time students have completed all required first-year courses, they may enroll full-time or part-time for remaining coursework at their option. Students are cautioned, however, that enrollment in 13 or more hours triggers the rule limiting outside work to no more than 20 hours per week.

Admission With Advanced Standing

Except for transfer applicants enrolled at the University of Missouri-Columbia (to whom transfer is granted more liberally), an applicant for admission with advanced standing must meet the requirements applicable to entering students; be eligible to return as a student in good standing to their current law school; and present a letter from the Dean of their law school showing such eligibility. In order to be considered for admission, a transfer applicant who would not have been admissible (based on LSAT score, undergraduate GPA, etc.) had such applicant applied for initial admission at UMKC, must have at least a B average after at least one full year of law study in an approved law school. Otherwise, a transfer applicant must have at least a C+ average in all law work in order to receive consideration. Admission decisions on transfer applications typically are not made before mid-July, once the number of available seats in the second-year class have been determined.

A maximum of 30 semester hours credit may be allowed for work successfully completed at another law school, with the right being reserved to refuse to transfer credit, in whole or in part, for any such coursework.

Except in the case of students transferring from the University of Missouri-Columbia, hours for a course in which less than a C was earned will not transfer, but retaking the course may be waived on an individual basis. Grades earned at another law school are not transferred, nor do such grades count for class ranking purposes. Transfer students must earn at least a C+ average in courses taken at the UMKC School of Law in order to graduate.

Admission Without Undergraduate Degree

Students who have completed at least 90 acceptable hours of credit in courses with substantial intellectual content in an approved institution, and have completed all non-elective coursework toward a bachelor's degree, may be admitted on the condition that the undergraduate degree be earned prior to or simultaneously with the granting of the J.D. degree. Usually this condition can only be met if the institution which will grant the undergraduate degree will accept credits earned in the UMKC Law School.

Since the UMKC Law School does not confer the undergraduate degree and assumes no responsibility in regard to it, it is the duty of the student to make certain that the requirements for the degree are satisfied. Questions concerning requirements for the undergraduate degree or of the transferability of law credits to complete the degree should be directed to the institution granting the undergraduate degree.

A letter from the institution confirming that it will accept credits earned in the UMKC Law School to complete the undergraduate degree must be submitted as part of the application for admission.

Scholarships

Scholarships are awarded to students based on the following criteria. Selection for most scholarships is based solely on material in the student's admission file. Information on scholarships for which applicants may apply will be included in their admission materials or financial aid packet.

Scholarships Based on Merit

Judge David T. and Hope Cavanaugh Scholarship

Scholarships are awarded each year to students from a fund established by Hope Cavanaugh, widow of Judge David T. Cavanaugh. Judge Cavanaugh was a 1940 law alumnus and judge in Jackson County, Mo. Selection is based on admission files as well as applications by current students.

William P. Eckels Memorial Scholarship

Scholarships are awarded each year to outstanding entering law students from a fund established by Mr. and Mrs. Philip Eckels, John S. Eckels, Katherine Rehkopf and Elizabeth Emerson in memory of their son and brother. Scholarships may be renewed each year if the recipient's academic performance is satisfactory. Selection is based solely on admission files.

Elizabeth Pope George Memorial Scholarship

In memory of Elizabeth Pope George, an alumna of the Class of 1924, a scholarship fund has been provided by her son and daughter. The fund awards one scholarship every three years to an outstanding female first-year student. The scholarship is renewed each year if the recipient's academic performance is satisfactory. Selection is based solely on admission files.

Rubey M. Hulen Memorial Honor Scholarships

Honor scholarships are awarded each year to outstanding entering law students from a fund provided by the will of Anna Hulen, widow of Rubey M. Hulen, a distinguished alumnus of the school. The scholarship is renewed each year if the recipient's academic performance is satisfactory. Selection is based solely on admission files.

Lathrop & Gage Diversity Scholarship

The law firm of Lathrop & Gage has created an endowment for the Law School to fund a merit scholarship for an outstanding student with financial need whose presence in the school furthers the goal of diversity to which the Law School is committed. Selection is based solely on admission files.

Law Foundation Scholarship

An honor scholarship is awarded each year to an outstanding entering law student. The following funds are provided to the Law Foundation for scholarship purposes: the James A. Bayles Memorial Scholarship Fund; the James P. Kem Memorial Scholarship Fund; and the Howard Allen Yost Memorial Fund. Selection is based solely on admission files.

Law Foundation/University Special Admissions Scholarships

Each year, up to four partial or full fee-waiver scholarships, plus cash amounts, are awarded to entering law students who have demonstrated scholastic superiority and who, because of diverse backgrounds and achievements, broaden the educational experience of all students at the school. They are supported in part by the memorial funds listed above that were established from contributions given to the Law Foundation. Recipients receive the scholarships each year if academic performance is satisfactory. Selection is based solely on admission files.

Diversity Scholarships

Several honor scholarships are awarded each year to entering students who demonstrate merit, and who, based on background and experience, contribute to the diversity of the school. Funds are provided by the University and the scholarships are renewed annually if academic performance is satisfactory.

The Jack and Helyn Miller Scholars Program

The Miller Scholars Program was established to recognize students who, through academic achievements and demonstrated leadership, are likely to enhance the UMKC School of Law, the legal profession and the community. Miller Scholar awards are made on a merit basis, without regard to financial need, to first-year law students. Stipends take educational fees, books and living expenses into consideration. Awards may be renewed each year for scholars who remain in good academic standing. Selection is based solely on applications by incoming students.

Omar E. Robinson Memorial Scholarships

Honor scholarships are awarded each year to outstanding entering law students from a fund established by the will of Ida C. Robinson, widow of Omar E. Robinson. The scholarships are renewed each year if academic performance is satisfactory. Selection is based solely on admission files.

Elizabeth Montague Averill Scholarship

Family, friends and alumni established this fund to enhance diversity among the UMKC School of Law student body by providing a scholarship to an older-than-average student who is returning to school to obtain a law degree. Special consideration is given to single, custodial parents. The scholarship is renewable subject to successful academic performance. Selection is based on applications by incoming students.

Harry L. Browne Memorial Scholarship

Helen L. Browne established this scholarship in memory of her late husband, Harry L. Browne, who devoted his professional career to the practice of labor law and who was recognized nationally as a specialist in that field. The aim of the scholarship is to attract to the UMKC Law School an outstanding entering law student who has demonstrated academic merit and who may be expected to practice employment and labor law with distinction. The scholarship is offered once every three years and is renewed each year if the recipient's academic performance is satisfactory. Selection is based on applications by incoming students.

Nonresident Tuition Scholarships

A limited number of nonresident scholarships are awarded each year to entering first-year law students with outstanding credentials who are not Missouri residents and who have not otherwise qualified for in-state fees. *(See Missouri Tax Scholarship.)* This scholarship pays the nonresident portion (roughly half) of the student's fees. Students will be awarded this scholarship for their first year of law school and will be expected to qualify for Missouri residency their second and third years, although the scholarship may be extended upon a showing of special circumstances. Selection is based solely on admission files.

David Wilbur Pansing Memorial Scholarship

An annual scholarship award recognizing a student who plans to use the legal education in government or political service. The scholarship may be, but is not automatically, renewed. The Pansing Scholarship was established in 1995 by Judge Jane Pansing Brown, Class of 1982, in honor of her father, a 1954 graduate of the Law School. Selection is based on applications by current students.

Trans World Airlines Inc. Scholarship

A scholarship is awarded each year to a student entering the second or third year of law school and who intends to pursue a career in natural resources or environmental law. Selection of the recipient, who must be a Missouri resident, is made according to procedures established by the deans of the two University of Missouri law schools. Selection is based on applications by current students.

Professor Robert C. Downs Scholarship

One scholarship is awarded each year to a second-year student who demonstrates a commitment of service to the School of Law, the local bar and future generations of law students by virtue of being an active member of the School of Law community. Students who have earned at least 40 credit hours and not more than 65 credit hours, and who are in good academic standing at the time of application, may apply. Selection is based on applications by current students.

Michael H. Coburn Legal Advocacy Fund

This fund was established by Randy James and the firm of Risjord & James and Richard Erickson and the firm of Van Osdol, Magruder, Erickson and Redmond, in honor and memory of the Hon. H. Michael Coburn, a respected Circuit Court judge. It provides scholarships to the twelve students who represent the school as members of the National Moot Court and Mock Trial Competition teams. These scholarships are designed to help continue the strong tradition of advocacy at the school and to enhance the quality of the trial and appellate bar in Kansas City. Selection is limited to students chosen for the National Moot Court and Mock Trial Competition teams.

Assistance to Students with Financial Need

There are various government loan programs administered by the UMKC Financial Aid and Scholarships Office. They include the Federal Stafford Subsidized and Unsubsidized Loan Programs, the Perkins Loan Program and the Access Loan Program. The office also administers a limited amount of scholarship funds in which law students may participate.

The following funds administered by the Law School and the Law Foundation provide assistance to students with financial need.

John Sublett Logan Scholarship

This scholarship was established by the John Sublett Logan Foundation in memory of Mr. Logan. It is designed to assist students in their legal education who, it is believed, will succeed in the legal profession and will give of themselves and their talents to the community in which they live. Selection is based on applications by incoming students. Preference will be given to those applicants who are natives or permanent residents of the St. Joseph, Mo., area.

The Joseph S. Chartrand Memorial Fund

This is a memorial fund established from contributions in memory of Joseph S. Chartrand, an alumnus who taught part-time at the University of Kansas City (UKC was the predecessor to UMKC). The Chartrand fund provides an annual amount to assist students in purchasing law books. Selection is based on applications by both incoming and current students.

The Tiera Farrow Memorial Scholarship

A memorial fund established by Tiera Farrow, a 1903 graduate of the Law School, provides a partial scholarship to a worthy woman law student in need of financial aid. Selection is based on applications by both incoming and current students.

Max Foust Scholarship

Established by colleagues of Max Foust, this scholarship is awarded to a law student with financial need. Preference is given to a student who has experience or skills which can be indicators of success in the area of trial advocacy. Selection is based on applications by both incoming and current students.

Suzanne Gilmore Memorial Scholarship

Family, friends and classmates established this scholarship in memory of Suzanne Gilmore, an alumna of the class of 1991. The scholarship is awarded to an older-than-average law student who is a single custodial parent pursuing a law degree as a second degree. The scholarship is renewed each year if the recipient remains a single custodial parent and maintains satisfactory academic performance. Selection is based on applications by both incoming and current students.

The Elmer B. Hodges Memorial Scholarship

An endowment fund established in the memory of Elmer B. Hodges provides scholarships for second- and third-year law students in need of financial aid.

Lathrop & Gage Diversity Scholarship

The law firm of Lathrop & Gage has created an endowment for the Law School to fund a merit scholarship for an outstanding student with financial need whose presence in the school furthers the goal of diversity to which the Law School is committed. Selection is based solely on admission files.

Diversity Scholarships

Several honor scholarships are awarded each year to entering students who demonstrate extraordinary merit and who, based on background and experience, contribute to the diversity of the school. Funds are provided by the University and the scholarships are renewed annually if academic performance is satisfactory.

Law Enforcement Scholarship

This annual scholarship will be awarded to one or more students pursuing a law degree at UMKC with financial need who are currently employed with a law enforcement agency or who have just left the agency to pursue a law degree. Preference will be given to students whose experience is with a law enforcement agency in the Kansas City metropolitan area. If no current students meet these requirements, the scholarship may be awarded to other students with financial need.

The Law Foundation Emergency Loan Fund

A fund established from contributions given to the Law Foundation provides emergency short-term loans for law students.

The Robert B. McCreight Loan Fund

A memorial fund established by bequest from the estate of Gevene S. McCreight in memory of her husband Robert B. McCreight (Class of 1932), who had a long and distinguished career as an officer and director of stockyard companies and as president of the American Stockyards Association.

Minority Nonresident Scholarships

Chancellor's Nonresident Minority Scholarships

The University awards nonresident fee scholarships to students who are members of historically under-represented minority groups (African-American, Hispanic and Native-American) who are newly admitted to the University. Students must identify themselves as members of these minority groups in the application for admission in order to obtain the scholarships.

Prizes and Awards

Law School and Law Foundation

Academic Enrichment Award

The Law School recognizes graduating students who have served as teaching assistants in the Academic Enrichment Program for their significant contributions to enhance the academic achievement of other students.

The Thomas E. Deacy Trial Lawyer Award

Endowed in the memory of Thomas E. Deacy Sr., an eminent trial lawyer, by his wife and son, Mrs. Thomas E. Deacy and Thomas E. Deacy Jr., the Deacy Award is presented annually to a third-year law student who demonstrates trial skills and attributes possessed by Thomas E. Deacy Sr.

The Jay B. and Frances Dillingham Public Service Award

An annual cash award is given to a student for participation in, or the study of, public service.

Emissary Award

The Law School recognizes the graduating students who have served as its Emissaries for their outstanding service to the school.

The Sanford B. Ladd Award Fund

This fund provides an annual cash prize to the student earning the highest grade in Real Estate Finance.

The Ralph S. Latshaw Award Fund

An annual award of law books is given to a graduating student who has excelled in criminal law.

Law Alumni Association Harry S. Truman Leadership Award

This prestigious award is given annually to a graduating third-year student who exemplifies commitment to the legal profession; service; and leadership standards as set by the Law School's most famous alumnus, Harry S. Truman. A cash award and plaque are presented.

Law Alumni Association Charles E. Whittaker Award

The Law Alumni Association's Whittaker Award recognizes the outstanding third-year student who has advanced the intellectual life of the Law School. Both a cash award and plaque are presented.

The Annette Moore Award Fund

An annual cash prize provided by this fund is given to the student earning the highest grade in Commercial Transactions.

Outstanding Academic Achievement Award

This award provides a certificate to the member of the third-year class who has achieved the highest cumulative grade-point average during three years of study.

Marvin and Patricia Rich Corporate Law Prize

A merit-based annual award which recognizes second-year UMKC law students of superior character, academic achievement and potential, and who plan to pursue a corporate legal specialty after graduation.

The Candler S. Rogers Writing Award

This award was endowed in memory of Candler S. Rogers, a former UMKC law professor, by a close personal friend and colleague. It recognizes Professor Rogers' long tenure as faculty adviser to the *Law Review* and his distinguished achievement in legal writing. It is given annually to the student who submits the most outstanding work of legal writing to the *UMKC Law Review*.

The John L. Sheridan Appellate Advocacy Awards

The Sheridan Awards were endowed by Norman O. Sanders in memory of his law partner, John L. Sheridan, a distinguished alumnus of the Law School. They are presented annually to students who have shown outstanding achievement in the Ellison Appellate Moot Court Competition.

Structured Study Group Leader Award

The Law School recognizes the graduating students who have served as teaching assistants in its Structured Study Group Program for their exemplary service in that capacity.

The Trial Practice Achievement Award

Endowed by contributions from classmates in memory of Terry T. Thomas, a Law School graduate, this award provides an annual cash amount and certificate to the student who has made the most significant progress in trial advocacy.

UMB Bank's Excellence in Estate Planning Award

An annual award, consisting of both a cash prize and plaque, is presented to a graduating student who has demonstrated an outstanding aptitude for estate planning and achieved an overall excellent academic record.

The UMKC Law Review Honor Award

Endowed by attorney Wilbur L. Pollard, this award is presented annually to the student who has rendered the greatest service to the *UMKC Law Review*.

Law Book Publishers

West Publishing Company

Awards are provided annually to recognize outstanding scholastic achievement.

Other

American Bankruptcy Institute Medal for Excellence in Bankruptcy Studies

The American Bankruptcy Institute annually provides a medal to a UMKC graduating law student who has demonstrated excellence in the study of bankruptcy law.

The Federal Estate Planning Symposium Prize

The prize competition was established to encourage student participation and excellence in the study of estate planning at the UMKC School of Law. UMKC law students compete for two first place and two second place cash awards which recognize students of superior character, academic achievement, and potential who plan to pursue an estate planning practice.

The National Association of Women Lawyers

A one-year honorary membership in the association and a year's subscription to the NAWL Law Journal is awarded to the outstanding woman law graduate.

The Order of Barristers

Certificates are awarded annually by this national honorary society to 10 graduates who have excelled in moot court, mock trial and other advocacy programs.

Research and Teaching Assistantships

A number of salaried positions as research or teaching assistants are available each year for second- and third-year students with superior academic records. Research assistant positions provide excellent training in legal research on important and interesting research projects being conducted by members of the law faculty. Students are selected to serve as teaching assistants for the Introduction to Law program, the Structured Study Group program and Academic Enrichment. These students work closely with program faculty to enhance first year student success.

Academic Program

Description of Program

The school's juris doctor degree program is designed to prepare students for the general practice of law and for policy-forming functions in government, business and other organizations in society. Courses provide students with a basic knowledge of the principles and processes of the Anglo-American system of law and of the integration of law into other disciplines and institutions.

The curriculum and program recognize that in order to be of the utmost service to clients, the lawyer must "see life whole" and appreciate the relationships among legal, social and political aspects of human endeavor. They also recognize that the best interests of society require a lawyer to be a thinker and scholar as well as a skilled technician.

Both the curriculum and methods of instruction are designed to meet these objectives. Although the casebook method is the predominant form of classroom instruction in larger classes, the faculty also employ other approaches. Classes such as lawyering skills, negotiating mergers and acquisitions, mediation, and law practice management combine theory with opportunities to learn about lawyering first-hand. Many of the classes use documents and "real life" problems to demonstrate concepts studied in class. The curriculum also includes opportunities for research and writing, seminar discussions, clinical instruction and skills training.

Graduation Requirements

The requirements for the J.D. degree:

- 1. Completion of 91 credit hours, 80 of which must be classroom credits;
- 2. A cumulative grade-point average of at least 2.3 (2.0 for those entering before Fall 2003)(see Administrative Rules and Regulations, Scholastic Probation and Dismissal, in this section);
- 3. Six semesters in residence carrying not less than 10 classroom credit hours each semester. Although three years of law study are usually required, students may graduate in two and one-half years. To do so requires attending at least two summer sessions. Each summer session may be considered one-half a semester for residency purposes, provided at least 10 classroom hours are completed in the two summer sessions;
- 4. Completion of all required courses (see Required Courses in this section);
- 5. Fulfilling the school's research and writing requirement. This requires students to have a rigorous writing experience evidencing legal analysis resulting in a paper of professional quality;
- 6. Regular and punctual class attendance;
- 7. Successful completion of all coursework within five years from the day students began their course of studies leading toward the degree. A student will not be allowed to enroll in any course after the five-year period.

Required Courses

First Year Required Courses

All students must complete the following required courses during the first year:

Full-Time Progress

Fall Semester (15 credit hours)

rail semester (15 creat nours)	
Contracts I	(3)
Criminal Law	(3)
Introduction to Law and Lawyering Processes I*	(3)
Property I	(3) (3)
Torts	(3)
Winter Semester (14 credit hours)	
Civil Procedure I	(3)
Constitutional Law I	(3)
Contracts II	(3)
Introduction to Law and Lawyering Processes II*	(2-3)
Property II	(3)

Part-time Progress

Students enrolled on a part-time basis must take three of the required courses, including Introduction to Law and Lawyering Processes, in their first year. The remaining courses must be completed in their second year of study.

*Introduction to Law and Lawyering Processes I and II: These two first-year courses introduce students to legal reasoning; analytical and critical thinking; case research and analysis; legal writing, including office memoranda, briefs and letters to and on behalf of clients; advocacy; and all forms of legal research. They offer education in many of the fundamental skills and processes of legal practice through a combination of lecture classes and small group sessions. They are required of all first-year law students in order to supply a strong foundation of thinking, research and writing skills upon which all later, advanced courses will depend. In the second semester, some students will be assigned to, and others will have the option to elect, analytical sections of Introduction to Law (Intro Plus) to obtain more intensive instruction and practice in legal analysis and problem-solving.

Other Required Courses

Students must complete the following courses as a condition of graduation:

<i>Required to be Taken During the Summer Preceding or Fall of Second Year:</i>	
Business Organizations	(4) (3)
Federal Taxation Civil Procedure II	(3) (2)
Required to be Taken During the Summer Preceding or Winter of Second Year:	(-)
Evidence	(3)
Required to be Taken During the Second or Third Year	:
Criminal Procedure I	(3)
Commercial Transactions, Sales and Leasing or Secured Transactions	(3)
Professional Responsibility	(2)
A course that fulfills the school's	(2-3)
jurisprudential requirement	

Required to be Taken at any Time Prior to Graduation and May be Taken During the Second Semester of the First Year: A course that fulfills the school's (3)

advanced torts requirement

Academic Support and Success

The School of Law is committed to its students' success. Although the study of law is a difficult and challenging endeavor, the school attempts to work with students to maximize their efforts and see them through the process successfully. Several programs contribute to this effort.

The Structured Study Group Program, which is based on the innovative Supplemental Instruction (SI) model developed by the campus Center for Academic Development, offers first-year students the opportunity to participate in guided study groups in one of their first-year courses. The groups are led by an upper-class student who has successfully completed that course. The student leader attends the class with the first-year students and conducts weekly small-group sessions in which the leader models successful learning strategies for that class.

The Academic Enrichment Program is available to all students. It is especially beneficial for those students who feel they need assistance in the transition to law study. The Academic Enrichment Program is not remedial in nature. Rather, it is designed to maximize the potential of students who participate by teaching skills and strategies for success in law school.

Academic Enrichment begins with a brief summer program immediately before orientation. This is a limited enrollment program to give students a "jump-start" to their legal education. This program is followed up during the academic year with weekly group meetings focusing on learning styles, learning strategies, time management and development of skills necessary for law school success. Students also meet weekly with Academic Enrichment teaching assistants. The year-long program is open to all students.

Many of the materials used in Academic Enrichment are available to students through the program's Web site at http://www.umkc.edu/law/enrichment. Periodic lectures covering the topics addressed in Academic Enrichment are provided for all students through the Academic Enrichment Lecture Series.

Areas of Study

Law students do not have a formal major, but have options for obtaining sequenced and advanced training in areas of interest to them, including

- Advocacy and Litigation,
- Business and Tax Law,
- Commercial Law,
- Estate Planning and Administration,
- Criminal Law and Procedure,
- Domestic Relations,
- Labor and Employment,
- International Law,
- Property and Real Estate,
- Civil Liberties and Civil Rights and
- Environmental Law.

In addition, through participation in the Inns of UMKC program: http://www1.law.umkc.edu/Students/inns/, externships, competitions, journals and student organizations, students are able to develop skills and contacts in specialized areas of the law. Students may also elect to participate in one of the Law Schools newly adopted formal concentrations, which are described below.

Students interested in particular practice areas are guided by faculty members and practitioners in developing their programs. The school, in conjunction with the Student Bar Association and the Kansas City Metropolitan Bar Association, sponsors a course scheduling and registration convocation and advisement program each semester at which representatives of the various practice areas give advice and guidance to students. In addition, an Elective Course Information Handbook is prepared each semester prior to course pre-registration that provides additional details regarding course sequencing, prerequisites and relevance of courses to practice and the bar exam.

Business & Entrepreneurial Law

The Business and Entrepreneurial Law Concentration is designed to provide a well-rounded program of study for students interested in an emphasis on business law and transactional practice. Reflecting the multidisciplinary nature of conducting business in compliance with a variety of modern laws and regulations, the required courses and electives for this concentration have been selected to expose students to a wide range of substantive law education and skills training opportunities. Thus, in addition to required and elective courses in pertinent areas of law, the curriculum requirements include a course with a practical skills component, as well as training in ethics and a research and writing project targeted at business and entrepreneurial law topics. Students who qualify for and successfully complete the credential requirements in the Business and Entrepreneurial Law Concentration should thereby be in an excellent position to pursue and succeed in careers as advisors to entrepreneurs and to for-profit or not-for-profit businesses, whether in private practice or in company legal departments. This concentration would also be suitable for students destined for public sector careers, particularly in areas involving the regulation of businesses and business transactions.

Admission

To be admitted to the concentration, an applicant must have a cumulative law school grade-point average of at least 2.5, and must have a grade-point average of at least 3.0 in all concentration courses or prerequisites which the student has taken prior to application for admission to the concentration.

For this purpose, prerequisite business courses will also be counted, including Business Organizations and Federal Income Taxation.

The deadline for application to the program shall be no later than the beginning of the student's fifth semester of law school. Any student who applies after the beginning of his or her fourth semester must demonstrate that the concentration can be completed by the end of the sixth semester of law school. Appropriate adjustments will be made to deal with part-time students not on the regular semester schedule. Exceptions to the deadlines may be made with approval of the Concentration Faculty Advisors, by majority vote.

General Requirements

Minimum Total Hours Required

The concentration will require a minimum of 15 hours of approved courses. Group A contains the courses that are "Required." Group B is a list of courses that students may choose among, designated as the "Grouped Required" courses. Students must take at least three of the courses from the Group B list.

Any course in Group A or B may be counted toward the required total hours even if it is also used to satisfy the student's Research and Writing Requirement.

Writing Requirement

Students must complete an academic research paper of high professional quality, sufficient to meet the Research and Writing Requirement standards of publishable quality, concerning a business or entrepreneurial law topic. The research paper must be certified as acceptable by one of the Concentration Faculty Advisors. Students may fulfill this requirement in conjunction with any of the Group A or B courses, or independently as part of the general Research and Writing Requirement, as part of an Independent Study option, through one of the Law Schools' journal offerings, or through a research project pursued at the Center for the City at UMKC. There is no separate requirement that the research paper be graded.

Practical Skills Component

Students must complete at least one course containing a substantial practical skills component. The following courses satisfy this requirement:

- Business Planning
- Negotiating Mergers & Acquisitions
- Real Estate Transactions Planning Workshop
- Entrepreneurial Law Clinic
- Advanced Legal Drafting (Business)

The requirement may be met by other internships, externships, simulation courses, drafting courses, or other courses designed to provide exposure to the type of work commonly performed by lawyers in the business and entrepreneurial law field, as the Concentration Faculty Advisors may find acceptable. It is intended that courses fulfilling this requirement will include at least one business drafting exercise.

Ethics Component

Each academic year, the Concentration Faculty Advisors will provide four contact hours of lectures, seminars or workshops dealing with ethical issues that frequently arise in the business and entrepreneurial law field. Each student must complete this ethics requirement.

Research Component

All concentration students must complete an advanced research offering which will provide advanced skills in research in the business and entrepreneurial law field. This may entail a separate one hour course of study, a one hour component of an existing course, or separate lecture, seminar or workshop offerings as designated by the Concentration Faculty Advisors.

Curriculum Requirements

Concentration Prerequisites or Co-requisites

- Business Organizations
- Federal Taxation

Courses Required for the Concentration (Group A)

- Securities Regulation
- Legal Accounting (or other approved accounting education)
- Either Taxation of Business Organizations or Corporate Tax 1 and Partnership Tax
- Either Secured Transactions or Real Estate Finance

Grouped Required courses (Group B) (Must take three courses)

- Business Planning
- Real Estate Finance
- Real Estate Transactions (May not count both Real Estate Finance and Real Estate Transactions toward the concentration.)
- Negotiating Mergers & Acquisitions
- Secured Transactions (If not taken to satisfy the UCC requirement or as a Group A course)
- Commercial Transactions (If not taken to satisfy the UCC requirement)
- Sales & Leasing (If not taken to satisfy the UCC requirement)
- Debtor/Creditor
- Bankruptcy (May not count both Debtor/Creditor and Bankruptcy toward the concentration)
- Entrepreneurial Law/Practice Clinic
- Alternative Dispute Resolution
- International Business Transactions
- Labor Law
- Employment Discrimination Law
- Employment Law (No more than one course of the group including Labor Law, Employment Discrimination Law and Employment Law may be counted toward the concentration)
- Administrative Law
- Intellectual Property Copyright Law (May not count both Intellectual Property and Copyright Law toward the concentration.)
- Antitrust and Competition Law
- Tax Exempt Organizations

The above requirements are in addition to any hours received in connection with the Writing Component (unless done in connection with a listed course), any hours received for the Advanced Research Component, or for the Ethics Component, all as described in the proposal. In addition, courses shall not be required for the concentration for any student who has not had a reasonable opportunity to take the course due to limited enrollment, or failure of the law school to offer the course at least once after the student has been admitted to the Concentration.

Graduation

For a student to be recognized as having graduated with a concentration in the Business & Entrepreneurial field, the student must have achieved a grade-point average of at least 3.0 in all concentration courses taken that are listed as Required or Grouped Required.

Litigation

UMKCs long tradition of educating distinguished litigators is an important reason that many students choose UMKC for their legal education. To enhance that tradition, the law school has established the UMKC Litigation Concentration, a program designed to help outstanding students focus on those courses that will give them the skills and knowledge necessary to excel in the ever-changing world of twenty-first century litigation. In addition to taking a rigorous yet varied menu of required and elective courses, each student in the concentration works closely with an assigned faculty adviser and is provided with additional training in legal writing, litigation ethics, and legal research.

Admission

Selection of Students for Admission to the Litigation Concentration

A. Deadline for admission to the Litigation Concentration: Students wishing to concentrate in litigation should apply not later than their fifth semester of law school. An application form will be available and must be submitted by the deadline for applications set by the litigation concentration advisors committee and circulated to the student body. Decisions as to whether a student will be admitted to the concentration will be made in the semester in which the student applies.

B. Procedure and Criteria for Selection:

- 1. The maximum number of students who will be permitted to enter the litigation concentration each year will be set by the litigation concentration adviser committee taking into account the ability of the advisors to provide adequate supervision and advising. Each litigation concentration adviser may set a maximum number of students that he or she will advise in the concentration.
- 2. The litigation concentration adviser committee will select the students to be admitted to the concentration. Criteria to be considered may include previous general academic performance in law school, previous academic performance in courses seen as particularly relevant to litigation, level of interest in litigation, and ability to identify an adviser willing to advise and supervise the student.
- 3. No student shall be admitted to the Litigation Concentration unless he or she has a grade-point average of 2.7 or above in all law school classes previously taken.

C. Part-time Students and Other Students with Unusual Schedules: The litigation concentration adviser commitee is authorized to make appropriate adjustments in the deadlines for part-time students or other students whose schedules do not substantially conform to the six semester paradigm.

General Requirements

Minimum Total Hours Required

- 1. To concentrate in litigation, a student must take a total of at least 26 hours in approved courses. Approved courses are those listed as "Required Courses," "Grouped Required Courses," and "Elective Courses."
- 2. No more than three hours of required upper-level courses, (including those used by the student to satisfy the UCC or Jurisprudence requirement) may count toward the required 20 hours.
- 3. A course (including Law 746) used to satisfy the student's writing requirement (see below) may be counted toward the total hours requirement even if it is also used to satisfy the student's Research and Writing Requirement.

Writing Requirement

- 1. Each student concentrating in litigation must complete a written project, approved by a concentration supervisor, on a topic dealing directly with litigation.
- 2. The written project must be of a scope and quality that would satisfy the law school's research and writing requirement for a J.D. degree.

3. The written project may satisfy both the concentration's requirement and the J. D. requirement.

Practical Skills Component

All students concentrating in litigation must take at least two of the following courses:

- Advanced Legal Writing: Litigation Drafting
- Appellate Advocacy II
- Appellate Advocacy III
- Appellate Advocacy IV
- Trial Advocacy I
- Trial Advocacy II
 Trial Advocacy III

Ethics Component

- 1. Each student concentrating in litigation must participate in at least one, half-day, non-credit workshop on ethical issues for litigators.
- 2. Workshops will be organized by the concentration advisers and conducted by faculty, practicing lawyers, or judges.

Research Component

- 1. Each student concentrating in litigation must participate in at least one, half-day, non-credit workshop on research materials and sources frequently consulted by litigators on issues directly related to the litigation process.
- 2. Workshops will be organized by the concentration advisers and the librarians. They will be conducted by faculty, librarians, practicing lawyers or judges.

Supervising and Advising Component

- 1. Each student concentrating in litigation shall be assigned a concentration adviser.
- 2. Each student concentrating in litigation shall meet with his or her adviser not less than twice a semester.

Curriculum Requirements

Distribution of Courses

A. Required Courses: All students concentrating in litigation must take each of the following courses:

- Civil Procedure I
- Civil Procedure II
- Criminal Procedure I
- Evidence

B. Grouped Required Courses: All students concentrating in litigation must also satisfy the Core Course Requirement, the Advanced Course Requirement, and the Skills Requirement set forth below:

- 1. Core Course Requirement: All students concentrating in litigation must take at least two of the following core courses:
 - Conflict of Laws
 - Federal Jurisdiction
 - Remedies
 - Criminal Procedure II
- 2. Advanced Course Requirement: All students concentrating in litigation must take at least one of the following advanced courses:
 - Alternative Dispute Resolution
 - Appellate Procedure
 - Civil Rights Litigation
 - Class Actions (Proposed)
 - Complex Litigation
 - Criminal Trial Techniques
 - Mediation
 - Professional Malpractice Litigation

- 3. Skills Requirement: All students concentrating in litigation must take at least two of the following courses:
 - Advanced Legal Writing: Litigation Drafting
 - Appellate Advocacy II
 - Appellate Advocacy III
 - Appellate Advocacy IV
 - Trial Advocacy I
 - Trial Advocacy II
 - Trial Advocacy III

C. Electives: The following electives may also help satisfy the minimum total hours requirement:

1. Clinics and Externships

- Bankruptcy Court Clerkship
- Child and Family Services Clinic
- Court Clerkship
- Death Penalty Clinic
- Department of Labor Clinic
- Family Law Clerkship
- Federal Public Defender Externship Clinic
- Legal Aid Clinic
- National Labor Relations Board Clinic
- Public Defender Trial Clinic
- United States Attorney's Office Law Clinic
- Wrongful Convictions II
- 2. Other coursework
 - Administrative Law
 - Advanced Lawyering Processes (second semester only)
 - Criminal Trial Techniques
 - Criminal Sentencing Law Practice & Procedure
 - Employment Discrimination
 - Family Law Practice
 - Famous Trials
 - Independent Study (if approved by student's concentration adviser on the basis that the course of study relates directly to litigation)
 - The Jury: Practice and Perspectives
 - Law Review (if approved by student's concentration adviser on the basis that the student's note or comment relates directly to litigation)
 - Legal Research (if approved by student's concentration adviser on the basis that the student's writing relates directly to litigation)
 - Problems in Missouri Civil Procedure (proposed)
 - Seminar in the Arts of Lawyering and Judging
 - Seminar in the Ethics of Criminal Advocacy
 - Wrongful Convictions I
 - Wrongful Convictions II
 - Any other course if, before beginning the course, the students obtains written approval from both the litigation concentration adviser committee and the student's concentration adviser. Such approval shall not be granted unless the committee and the adviser find that, in light of the student's other courses and the student's litigation-related goals, the course will advance the student's study of litigation to an extent equivalent to other litigation electives.

D. Courses may be added or deleted from the lists contained in sections A through C above with approval of the litigation concentration adviser committee and the faculty.

Graduation

For a student to be recognized as having graduated with a litigation concentration, the student must have fulfilled the following requirements:

1. The student must have satisfied all general and curriculum requirements set forth above.

2. The student must have achieved a grade-point average of at least 3.0 in the field. This grade-point average shall be computed considering all Required Courses, Grouped Required Courses, and Elective Courses in the concentration taken by the student, including any that exceed the minimum hour requirements for the concentration.

Urban, Land Use and Environmental Law

Beginning in the fall of 2004, UMKC law students can engage in a concentrated course of study in Urban and Land Use Law, Environmental Law or both. This concentration builds on a tradition of excellence in urban and land use law at the law school and on the UMKC law faculty and students' 35 year editorship of The Urban Lawyer, the national quarterly law journal of the American Bar Association Section of State and Local Government Law. Students in this specialized course of study will be able to choose from a variety of courses, seminars, internships, and externships in the law school and in other units and departments of the university including public administration, urban planning and architecture, geosciences, political science and economics. Students who choose to pursue this concentration will be prepared to enter the job market with specialized knowledge of the issues and law relevant to land use; real estate development; state, regional and local government and the environment.

Admission

Students in their second or third year may elect to specialize in the "Urban, Land Use and Environmental Law" curricular concentration. To do so, a student must apply no later than the end of the second year. Advice about compliance with the concentration requirements is available from the Concentration Faculty Advisors.

General Requirements

Minimum Total Hours Required

Students must complete seven of the listed courses: students must complete all courses in Group A, three courses from Group B, and one course from Group C. All courses must be taken for a grade (with the exception of those courses for which a grade option is not available). Course work satisfying this requirement must total at least 15 hours.

Writing Requirement

Students must complete an academic research paper of high professional quality concerning a topic within the field of the concentration. They may fulfill this requirement in conjunction with any of the listed courses, or as part of the Research and Writing requirement, as part of an Independent Study option, through one of the Law School's journal offerings, or through a research project pursued at the Center for the City at UMKC. Unless written to meet the R&W requirement, the paper must be written for a grade. Advance approval of the topic and faculty adviser is required by one of the land-use and environment faculty.

Practical Skills Component

Students must participate for at least one semester in a practical skills component. The following opportunities satisfy this requirement: the EPA Law Clinic, Region VII; the EPA Law Clinic, Agricultural Center; or a service placement with the Center for the City at UMKC. Participation in the EPA Law Clinics can simulataneously be used to satisfy the minimum hours requirement.

Ethics Component

Ethical considerations will be incorporated into the listed concentration courses.

Research Component

All concentration students must complete an advanced

research offering which will provide advanced skills in research in the urban, land use and environmental law field. This may entail a separate course of study, a component of an existing course, or separate lecture, seminar or workshop offerings as designated by the Concentration Faculty Advisors.

Curriculum Requirements

Group A: Core Courses (must take all)

- Administrative Law
- Environmental Law
- Land-Use Planning

Group B: Specialized Courses (must take three)

- Air & Water Regulation
- Cities and the Environment "J"
- Current Issues in Property Law Seminar
- Environmental Law Seminar
- International Environmental Law
- Law and the American Indian
- Natural Resources Law
- Preservation Law
- Seminar on Urbanization
- State & Local Government Law
- Toxic Torts
- Urban Lawyer Board
- U.S. Environmental Protection Agency Law Clinic: Region VII Headquarters
- U.Š. Environmental Protection Agency Law Clinic: National Agricultural Compliance Assistance Center
- Water Law

Group C: Related Law Courses and Interdisciplinary Courses (*must take one*)

- Alternative Dispute Resolution (2)
- Complex Litigation (3)
- Economics & the Law (2) "J"
- Federal Jurisdiction (3)
- Legislation (3)
- Real Estate Finance (3-4)
- Real Estate Transactions (2)
- State and Local Government Tax (2-3)
- Biogeography and Landscape Ecology (3) (Department of Geosciences)
- Managing Urban Economic Development (3) (Bloch School)
- Urban and Regional Planning for Urban Administrators (3) (Bloch School)
- Urban Planning Theory and Practice (3) (Department of Architecture)
- Urban Planning and Design (This course would have additional assignments for law students)

Graduation

To be recognized as having graduated with a concentration in Urban, Land Use and Environmental Law, students must complete all concentration requirements with an average grade of B or better (and no grade below a C). Students who have met the requirements of the concentration by the time of graduation will have this distinction noted at that time.

J.D./M.B.A. and J.D./M.P.A. Combined-degree Programs

The School of Law has established combined-degree programs with the Henry W. Bloch School of Business and Public Administration. The program allows students to earn a juris doctor degree and a master of business administration or a master of public administration degree on an accelerated basis through cross-acceptance of some credit hours. Applicants to the program must satisfy the admission requirements of each school and, if admitted into the program, may enroll in the first year of law school either before or after beginning M.B.A. or M.P.A. courses. Further information on admission and dual-degree requirements is contained on the School's Web site at

http://www1.law.umkc.edu/Academic/index.htm.

Combined-Degree Programs for J.D./LL.M. (Taxation) and J.D./LL.M (General) with Estate Planning Concentration

Qualified J.D. students will be permitted to apply up to 10 credit hours (12 with the permission of the Graduate Studies Committee) of UMKC graduate courses approved for this purpose toward an LL.M. (Taxation) or LL.M. (General) with Estate Planning Emphasis degree as well as toward a J.D. degree. This will allow students to earn such LL.M. on an accelerated basis, generally requiring only one additional semester (or two summer sessions) beyond that required for the J.D. degree.

The program is available to qualified students who begin their legal studies at the UMKC School of Law, who transfer to the school or who attend as visiting/certification students during their fifth or sixth semester of law study. For further information on admissions and combined degree requirements, contact the School of Law's Admissions Office or the programs by e-mail at UMKC-LLMTax@umkc.edu.

Administrative Rules and Regulations

Attendance

The Law School expects regular and punctual attendance by all students enrolled in Law School courses. Further, students should be prepared for each class session.

The following guidelines and procedures have been adopted to implement the School's attendance policy:

Attendance Guidelines and Procedures

- 1. Faculty shall maintain attendance each day of class by sign-in sheet or other method within the discretion of the faculty member. Absences shall be reported to the Office of the Assistant Dean for Students within one week of the missed class.
- 2. *Total Number of Unexcused Absences:* Students are allowed to be absent from a course the equivalent of one week of class sessions (one-half week in summer session) for unexcused absences.
- 3. *Total Number of Absences Allowed Whether Excused or Unexcused:* Students are allowed to be absent from a course no more than the equivalent of three weeks of class sessions (one and one-half week in Summer Session), whether excused or unexcused.
- 4. Any absence in violation of No. 2 shall result in a penalty to be assessed by the faculty member teaching the course, which may include a grade of F, grade reduction, additional coursework, etc. Professors must inform students enrolled in their courses of the penalty to be assessed for such violation at or before the first session of the course.
- 5. Any absence in violation of No. 3 shall result in the student's timely withdrawal from the course provided the student is in good standing at that time, i.e., provided the student has not earned the grade of F for work earned at the time of withdrawal. Students who are not in good standing or who fail to timely withdraw will receive a grade of F for the course. To be timely, a withdrawal must be accomplished by the student no later than 7 days after being notified by the Office of the Assistant Dean for Student Services of the violation. Notification is complete

upon mailing to the student at the student's last known address.

6. The Office of the Dean has the responsibility for compiling absences and notifying students of violations.

a) "Excused absence" shall mean illness of self, illness of child, school-sponsored participation in competitions or a family emergency;

b) Flat tires and similar automotive failures, computer problems, speeding tickets, work, interviews, court dates, etc., generally will be deemed *per se* unexcused absences;
c) "Family emergency" will generally be limited to doth or attest to the problem of the doth or attest to the problem.

limited to death or catastrophic occurrence affecting the student's immediate family or a close extended family member.

- 7. Absences will be presumed to be unexcused, unless no later than one week after the missed class the student demonstrates to the Assistant Dean for Student Services that the absence is excused as defined in this policy.
- 8. This policy does not affect a faculty member's guidelines for the turning in of out-of-class assignments and papers. The individual faculty member, not the Dean's office, has the sole discretion to award late penalties for failing to turn in an assignment or paper on time or to excuse the late handing in of assignments and papers. For this reason, the Dean's office only oversees student absences from class.

Snow Policy

University policy mandates that the University always will remain open even during inclement weather, and classes will generally be held. In the event of a major snow or ice storm creating potentially dangerous conditions, a decision may be made to suspend some or all classes. Announcement of such a decision will be made on local radio and TV. Efforts will be made to establish a call-in line for students to determine whether a class or classes will be held.

Examinations and Grades

In most courses, the final grade is based on the student's achievement on an examination given at the end of the semester. Examinations are anonymous, and papers are identified solely by number. Each student is expected to take examinations at the scheduled times. For failure to do so, a grade of F is assigned.

Grading of student work is on a 4.0 system:

A + = 4.3	A = 4.0	A- = 3.7
B + = 3.3	B = 3.0	B- = 2.7
C + = 2.3	C = 2.0	C- = 1.7
D + = 1.3	D = 1.0	D - = 0.7
$\mathbf{F} = 0$		

Some courses are graded on a pass/fail basis.

A student receiving a grade of F in a required course must repeat and pass the course. Grades of F remain on a student's transcript and count toward a student's grade-point average even if a course for which an F is given is repeated and passed.

The temporary grade of I (incomplete) is recorded when the student has not completed the work required for the course. It may only be entered with the written permission of the professor teaching the course. If the work is not completed and a permanent grade not submitted to the school's records office by the end of the following semester, the I grade will be replaced with a grade of F.

Final Examination Rescheduling Policy

A student may request that one or more final examinations be rescheduled under the following circumstances:

- Two final examinations in the same calendar day;
- An evening final examination followed by a morning final examination the next calendar day;
- Three final examinations on three consecutive days (in the first week of examinations only);
- Four final examinations in five days (in the first week of examinations only);
- An emergency warrants rescheduling (request must be documented).

The policy with respect to take-home final examinations is as follows:

- If the take-home final examination is "floating," (e.g. the student may choose when to take it within a defined timeframe) the student may not **create** a conflict by opting to take it during an interval conflicting with another final examination;
- A take-home final examination does not conflict with the preceding final examination(s) under the first or third rules above (two exams in the same calendar day or three exams on three consecutive days), if it may be checked out at least four hours after the prior examination is scheduled to conclude;
- A take-home final examination does not conflict with the preceding final examination(s) under the fourth rule above (four exams in five days), if it may be checked out on Friday, at least four hours after the prior final examination is scheduled to conclude;
- Perceived conflicts involving take-home final examinations of greater than 48 hours in length will be dealt with on a case-by-case basis.

Requests to reschedule a final examination should be directed to the School's Director of Student Support Services.

Once a conflict has been identified, the director will determine which final examination(s) to move, and to what day and time, in order to eliminate the conflict.

Requests to reschedule a final examination on short notice because of severe illness or an emergency must be documented, and will be considered on a case-by-case basis. All such requests must be presented to the Director of Student Support Services **immediately**.

The policy with respect to requests to reschedule based upon disability is as follows:

- All disability-based requests must be approved by the Campus Coordinator for Disabled Student Services (*See*, **Disabled Student Services** and **Non-Discrimination Policy**, above);
- The Director of Student Support Services will reschedule a final examination because of disability only on request of the Campus Coordinator for Disabled Student Services.

Credit in Lieu of Grade Option

After completion of the first year, a student may take one elective course ordinarily graded (except a 4-credit-hour class) on an ungraded basis. For a "pass" to be posted on the student's record, work done for the course must be equivalent to a grade of C- or better; otherwise, the actual grade received will be posted.

The student must make this election before the beginning of the semester by completing and filing the appropriate form (available at the Law School) in person at Registration and Records (115 Administrative Center, 5115 Oak).

Appeal of Grades

Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the professor. The school's grade appeal procedure is available only for the review of allegedly capricious grading, and not for review of a professor's evaluation of a student's academic performance.

Capricious grading, for grade appeal purposes, consists only of any of the following:

- 1. The assignment of a grade to a particular student on some basis other than the performance in the course;
- 2. The assignment of a grade to a particular student by resort to more exacting or demanding standards than were applied to other students in the course; or
- 3. The assignment of a grade by a substantial departure from the professor's previously announced standards.

Step 1: The student should first discuss the course grade fully with the professor. This must be done within six weeks after the professor turns in the grade or the beginning of the succeeding regular academic semester, whichever is later.

Step 2: If the matter is not resolved through consultation with the professor, the student may appeal to the dean. This must be done within 10 days after notification of the decision of the professor. The appeal to the dean shall be in writing, and shall state which of the three charges of capricious grading is alleged to have been violated and shall specify such facts as are relied upon to support the charge.

Step 3: The dean shall review the appeal and, if found to be without merit, shall dismiss it. If it's determined that the appeal may have merit, the dean shall appoint an ad hoc faculty committee to review the record and provide advice on the matter. The grade in any course that is based on an anonymously-graded examination shall be presumed not to be capricious.

Step 4: If the dean believes a change in the grade to be warranted, he or she shall present a report to the faculty of the Law School in order that the faculty may act on the matter.

Step 5: If the student is dissatisfied with the action of the dean or the faculty, the student, within 10 calendar days of the decision of the dean, may appeal to the chancellor in accordance with the University of Missouri-Kansas City Procedure for the Appeal of Grades.

Alcoholic Beverages

There may be no drinking or serving of alcoholic beverages in the law building or on other campus property without the approval of the vice chancellor for administrative affairs.

Student groups desiring approval must request the approval at least two weeks prior to the date of the intended use. Request forms are available in the dean's office.

Parking

The parking lot and driveway on the north side of the law building are for faculty and staff parking. Violators deprive faculty and staff of parking spots they pay for and violators will be ticketed and their vehicles may be towed or locked by a "boot." A number of metered spots are in the lot and may be used by students who have registered their vehicles. After 4:30 p.m., a portion of the lot is open to students provided they have purchased a student parking permit. Students must register vehicles with the Campus Police.

Withdrawal from Courses

A student enrolled in a course cannot unilaterally withdraw from it but must secure permission from the associate dean to do so, and must follow prescribed withdrawal procedures. A student who is not in good standing in the course at the time of withdrawal (has earned a grade of F at that point) will receive a grade of F for the course.

Scholastic Probation and Dismissal

Students Beginning Legal Studies Before Fall 2003. Students will be placed on academic probation whenever their cumulative grade-point average falls below 2.0. Students have one semester following this to raise the cumulative grade-point average (GPA) to 2.0 or be dismissed for academic deficiency. A student on academic probation may not work or engage in significant Law School extracurricular activities.

Students readmitted after dismissal on the grounds of academic deficiency will have one semester to raise the academic average to 2.0, unless the faculty decides that a longer period is warranted. If a probationary student successfully raises his or her average to at least 2.0 at the end of the probationary period and subsequently falls below 2.0 again, the student will be dismissed and a second probationary period will be granted only after a petition and favorable faculty action.

Students Beginning Legal Studies Fall 2003 or thereafter. A student who obtains a grade-point average below 1.8 in his/her first semester will be automatically dismissed from law school. Such student may apply for readmission under then existing standards and procedures for readmission, and may apply for admission, as a new student, to the law school beginning no earlier than the following fall semester.

A grade-point average of 2.3 is required for graduation. A student will not be permitted to graduate and will be dropped for academic deficiency if the student achieves the credits required for graduation but does not have a 2.3 GPA.

A student will be placed on academic probation if his/her cumulative grade-point average falls below 2.0. Any student on probation will have one semester to raise the cumulative grade-point average to the required level (2.0) or be dismissed for academic deficiency. A student on academic probation may not work or engage in significant Law School extracurricular activities.

Students readmitted to the School after dismissal on the grounds of academic deficiency will have one semester to raise the academic average to the required level, unless the faculty decides that a longer period is warranted. If a probationary student successfully raises his or her average to the required level at the end of the probationary period and subsequently falls below 2.0 again, the student will be dismissed and a second probationary period will be granted only after a petition and favorable faculty action.

Dean's List

The Dean's List recognizes students who have demonstrated academic excellence in a semester. To be so recognized, a student must have achieved at least a 3.0 GPA for the semester carrying a course load of at least 12 School of Law course credit hours with at least three of those courses being graded courses.

Acceleration

Juris doctor degree students may graduate in two and one-half years. To do so requires attending at least two summer sessions in order to accumulate enough credit hours to meet the 91-credit-hour requirement and the residency requirement. Each summer session may be considered one-half of a semester toward satisfying the residency requirement.

Employment by Juris Doctor Degree Candidates

Full advantage of the opportunity for a sound legal education only can be gained by devotion of sufficient energy and attention to legal studies. The excessive diversion of time and energy to employment can seriously impair success in law school and preparation for law practice. For this reason, full-time first-year law students should not engage in any outside work, and upper-class students should not engage in excessive outside work.

Accreditation requirements mandate that full-time students devote substantially all of their working hours to the study of law and not be employed in outside work in excess of 20 hours per week. The UMKC School of Law has the obligation to adopt and enforce policies assuring that its full-time students meet these requirements.

Students on academic probation may not work.

Activities and Services

Competitions

The School of Law has a comprehensive program of advocacy training that involves both intra-school competition and participation in external programs. The school has established a strong tradition of excellence in inter-school competition both at the regional and national levels.

National Mock Trial Competitions

Students compete in intra-school competition to demonstrate their abilities in trial skills. Those achieving the best scores represent the school in regional and national mock trial competitions, including the National Trial Competition (coordinated by the American Bar Association's Section on Litigation and the Texas Young Lawyers Association) and the Association of Trial Lawyers of America National Student Trial Advocacy Competition.

National Moot Court Competitions

All students may participate in intra-school moot court competition. Additionally, students showing outstanding appellate advocacy abilities represent the school in annual regional and national moot court competitions, including the National Moot Court Competition, sponsored by the Association of the Bar of the City of New York. The six students who represent the school as members of the National Moot Court teams receive an H. Michael Coburn Legal Advocacy Scholarship in their third year.

Outstanding student advocates also participate in a variety of other competitions, including the Administrative Law Moot Court Competition, the Frederick Douglass Moot Court Competition, the Judge Conrad B. Duberstein National Moot Court Competition (Bankruptcy Law), the Giles Sutherland Rich Moot Court Competition (Patent Law) and the Jessup International Law Moot Court Competition. Teams compete locally, nationally and internationally in these competitions.

Client Counseling and Negotiation Competitions

Each year the School selects teams to compete in the ABA Negotiation Competition and the National Client Counseling Competition. Selection is based on intra-school competitions open to all students.

The Scott Welch Memorial Advocacy Fund

This fund was endowed by alumnus Lantz Welch in memory of his son, and by memorial contributions of friends of the family. The fund provides travel expenses and recognition for students representing the School of Law in national appellate advocacy and mock trial competitions.

Viewing Actual Court Proceedings

The E.E. "Tom" Thompson Courtroom, attached to the law building, is one of the premier teaching courtrooms in the country. Four remote-control cameras with a state-of-the-art control room, together with a 70-seat sound-proof observation balcony, provide a full opportunity for teaching with the aid of audiovisual critique. A complement of ancillary rooms enables the courtroom to be used by state and federal trial and appellate courts, providing special learning experiences for students.

Scholarly Publications

The UMKC School of Law offers several opportunities for students to develop research, writing and editorial skills through journal participation.

Law Review

The UMKC *Law Review* is a scholarly legal publication, managed by the UMKC Law Review Editorial Board and edited by the board and staff. Law students are invited to become a member of the *Law Review* based on their scholastic performance and achievement in a writing competition, which occurs during the winter semester. *Law Review* membership is considered one of the highest Law School honors. The *Law Review* is responsible for publishing four issues a year. Each quarterly issue contains contemporary articles by leading authorities in the legal community, comprehensive comments on legal topics written by senior staff members and notes by staff members analyzing recent legal developments. By actively participating in the publication process, staff members greatly improve their writing, analytical and editing skills.

Urban Lawyer

The *Urban Lawyer* is a prestigious and widely-read journal covering the areas of urban and public law. It is published quarterly by the American Bar Association's Section on State and Local Government Law. The articles are collected, annotated and edited by student editors and faculty members at the Law School. As a member of the staff, the student is provided with an opportunity to enhance research, writing, and analytical skills, and to gain a wide spectrum of knowledge of urban law. Selection for staff positions is by a writing competition at the beginning of the winter semester.

Journal of the American Academy of Matrimonial Lawyers

The American Academy of Matrimonial Lawyers has chosen the School to assume editorial responsibility for its twice-yearly publication. The journal uses a symposium style format with featured articles on a selected family-law theme and an annotated bibliography of articles related to the issue's theme. The journal is edited by a faculty member with student editorial assistance. Under the faculty member's supervision, students research and write papers on a topic designated for an upcoming issue and edit submitted lead articles. Papers submitted by students are considered for publication in the journal.

Urban Mission

The following programs and activities are illustrative of the many ways in which the School of Law serves its urban mission.

Child and Family Services Clinic

The UMKC Child and Family Services Clinic provides legal services and representation for children who have become wards of the state as a result of abuse or neglect. Working in collaboration with the Missouri Department of Social Services and under the supervision of the clinical professor, law students investigate, research and advocate legal positions necessary to ensure safe, stable family structures for children.

Inns of UMKC

The Inns of UMKC are part of a two-tier approach by the School of Law to address our students need for additional advice and assistance from the faculty and members of the local bar and judiciary. The program stems from an understanding that students benefit from consultation regarding matters such as the stress of law school, professionalism, the challenges presented by a career in the practice of law, course selections, bar exam preparation, summer clerkships, and post-graduation employment (including judicial clerkships). Each Inn is run independently through the collaboration of one prominent member of the local bar, one member of the local judiciary and two faculty members. The grouping of students in the Inns directly corresponds to the 14 Introduction to Law workshops, and faculty members also serve as the students advisers. The goal of the Inns of UMKC program is that these Inns will grow to serve a vital role in the education and training of future community lawyers and leaders, comparable to the roles played by the old English Inns of Court.

Kansas City Metropolitan Bar Association

The School of Law enjoys a close relationship with the Kansas City Metropolitan Bar Association. Each year, the Young Lawyers Section of the association presents a number of educational programs of interest to law students, helping them bridge the gap between theory and practice. In addition, it hosts a beginning-of-the year picnic at which students meet area lawyers and judges, and presents an end-of-the year bar examination information session. As a result of such activities, UMKC law students have access to excellent programs, make important contacts and enjoy the collegiality of an association dedicated to the highest standards of professional integrity and skill.

Kansas City Tax Clinic

The Kansas City Tax Clinic is a project of the UMKC Graduate Tax Law Foundation, with support from the UMKC School of Law. Planning for the clinic, which is housed in the law building, started back in 1996, with many faculty, staff, alumni and tax practitioners making contributions and giving generously of their time and effort to make the Kansas City Tax Clinic a reality.

The Kansas Ćity Tax Clinic began serving clients in the fall of 1999. UMKC School of Law students in the LL.M. in Taxation program, the combined J.D./LL.M. in Taxation program, or other students with the permission of the director of the tax program, represent clients in tax controversy matters under the supervision of the director and volunteer tax practitioners. The clinic has been awarded Internal Revenue Service grants to assist low-income taxpayers with appeals.

Law Practice

Pursuant to Missouri Supreme Court Rule 13, a student who has completed legal studies amounting to one-half of the credits required for graduation and who is in good standing and of good character, fitness and moral qualification to practice law may appear in courts or before administrative tribunals in Missouri on behalf of an indigent person, if accompanied by a supervising attorney. The student may perform other legal work, such as preparation of pleadings and briefs on behalf of an indigent, so long as the work is done under the guidance of an attorney. An eligible student also may appear in any matter on behalf of the state with the written approval of a supervising lawyer. Similar opportunities for student practice are available under Kansas Supreme Court Rule 709. Additionally, similar skills experience is possible in the Federal Government.

Midwestern Innocence Project

The Midwestern Innocence Project provides pro bono investigative and legal assistance to prisoners with persuasive actual innocence claims. Students learn legal and investigative strategies through Wrongful Convictions I and II classes. In Wrongful Convictions I, students have the opportunity to work on screening of inmate files to identify possible cases of wrongful conviction. Wrongful Convictions II provides students hands on work with cases that have passed through the first level of screening with students receiving the transcripts and case documents in addition to the briefs and opinion in the case. Students report on the likelihood that an inmate is innocent and the strategies available for pursuing the claim of innocence.

Public Interest Litigation Clinic

The PILC is an independent organization. It litigates and provides advice and research assistance to Missouri defense attorneys in capital punishment cases. The School's Death Penalty Clinic and the "Problems and Issues in the Death Penalty" course are taught in conjunction with the PILC, and the center's staff provides valuable resources for the students in those classes.

UMKC Entrepreneurial Legal Services Clinic

Initially funded by the Kauffman Center for Entrepreneurial Leadership, students participating in the UMKC Entrepreneurial Legal Sevices Clinic provide advice and assistance to a wide variety of owners of new and existing small businesses who do not have, or cannot afford, the market price for professional assistance. Each semester, up to 10 students who have taken certain courses (Business Organizations and Federal Taxation and Business Planning are recommended) are selected to serve clinic clients.

The clinic is located in the Brush Creek Enterprise Center, 4747 Troost. Students gain "hands-on" practical experience by creating, under the supervision of experienced faculty, clients' business entites (such as limited liability companies and corporations), and drafting documents such as operating and partnership agreements, employment contracts, and non-competition contracts. Students may enroll in the clinic in the fall, winter and summer semesters.

Professional and Social Activities

The School of Law has a full range of professional and social activities available for students. These activities provide an opportunity for students to get to know one another as well as to interact with faculty and members of the legal community.

American Bar Association/Law School Division

The ABA/LSD is a national organization open to all law students. It was founded to encourage law students' participation in the efforts of the organized bar in forming and revising standards of legal education. Through the division, students have a voting influence on the positions taken by the ABA in regard to current issues and problems facing the legal profession. Historically, the division has enjoyed strong support from UMKC law students, many of whom have become regional and national officers.

Animal Law Society

The purpose of the Animal Law Society is to foster critical thought and debate about the application of animal-rights principles to the law. The Society embraces the principles that the common law classification of non-human animals as personal property must be reformed to increase the legal status of non-human animals in order to assure them greater protection under the law; that the use of animals for scientific purposes is not beyond moral criticism; and that human beings have a responsibility to protect non-human animals and their natural habitats. The Society seeks to promote an awareness of these principles and to further their application through its activities.

Association of Women Law Students

This organization was formed to provide a forum for women law students, to promote the role of women in the legal profession and its bar associations, to encourage the acceptance of qualified women in the academic and legal communities, and to exert an influence in the law, the profession, the school and the community.

Black Law Students Association

BLSA, founded in 1968 by black law students, is a national organization representing more than 90 percent of the nation's African-American law students. Its goals are to articulate and promote the professional needs and goals of African-American

law students; to focus upon the relationship of the African-American attorney to the American legal system; to instill in the black attorney and law student a greater awareness of the importance of commitment to the needs of the African-American community; and to influence American law schools, legal fraternities and legal associations to use their expertise and prestige to bring about change within the legal system in order to make it responsive to the needs of the African-American community. The school's BLSA chapter works closely with local bar associations and area leaders to strengthen the role of the black lawyer in the Kansas City community.

Business and Tax Law Society

The Business and Tax Law Society is an organization of law students interested in Business and Tax Law.

Christian Legal Society

Founded upon Alexis de Tocqueville's notion that as a Judeo-Christian nation, America will remain great only as long as America remains good, the CLS seeks to discern the parameters of the ethical vitality and moral essence of the law. Open to all students, the CLS offers opportunities for spiritual and temporal support as well as searching dialogue and well-earned rest and fellowship during each academic year.

Constitutional Law Society

The purpose of the Constitutional Law Society of the School of Law is to explore and inform students about constitutional law. The Constitutional Law Society endeavors to meet its objectives by sponsoring speakers and workshops providing insight into the area of constitutional law.

Emissaries

The Emissaries are the official student public relations team for the School of Law. Emissaries are chosen by faculty, staff and students from a select pool of applicants. This group works closely with the Law School administration in such areas as recruitment, representation of the Law School community at special events and serving as tour guides to prospective students and visitors. Emissaries enjoy a good deal of contact with alumni and members of the Kansas City metro law community. They also participate in various community service activities.

Environmental Law Society

The Environmental Law Society is a group for those who are interested in environmental issues, especially issues in the Midwest, and particularly in the Kansas City metro area. Moreover, the Environmental Law Society is available to assist and educate students who are interested in pursuing a career in Environmental Law. It is an organization valuing service and the welfare of the community in relation to its environment.

Federalist Society

Founded in 1982, the Federalist Society has 110 chapters at law schools across the country. Its membership consists of students who are interested in legal and political topics with an emphasis on separation of powers and traditional values and views about the law. The UMKC chapter presents speakers and sponsors forums on a variety of issues. An active and growing lawyer's chapter cooperates with the UMKC chapter.

Health Law Society

The purpose of the Health Law Society is to help students of UMKC Law School gain knowledge of current issues in the world of health care and to promote education of those issues.

Hispanic Law Students Association (HLSA)

The purpose of HLSA is to articulate and promote the professional needs and goals of Hispanic students by using the collective resources of the School of Law and the legal community; to focus on the relationship of the Hispanic attorney to the American structure; to instill in the Hispanic law student a greater awareness of commitment to the needs of the Hispanic-American community; to foster and encourage professional competence; and to do all things necessary and lawful to accomplish these purposes.

Honor Court

The Student Bar Association of the Law School has adopted an honor code prohibiting any conduct which would give an unfair advantage to any student in any academic matter or in any matter relating to academic credentials. The honor code has been posted on the school's World Wide Web site.

The honor court hears all cases involving alleged violations of the honor code. It is composed of a chief justice and four associate justices appointed from the student body by the president of the Student Bar Association with the approval of its board of governors.

Intellectual Property Law Society

The Intellectual Property Law Society is an organization of law students interested in patent, copyright, trademark or trade secret law. The primary purpose of the IPLS is to promote opportunities for its members to learn more about intellectual property issues through course offerings, participation in moot court competitions, interaction with local practitioners and summer clerkships.

International Law Society

The International Law Society offers students the opportunity to focus on the many facets of law from an international perspective, from the practicalities of a legal practitioner to the theoretical applications of multinational dispute settlements. The current explosion of trade opportunities, worldwide environmental concerns and new partnerships in political and economic arenas present exciting opportunities for tomorrow's lawyers to shape the future of global cooperation.

Jewish Law Students Association

The purpose of the organization is to meet the needs of Jewish law students at the University of Missouri-Kansas City School of Law and to promote awareness and understanding of the Jewish people, their religion, traditions, and of the State of Israel.

Legal Fraternities

Chapters of three national legal fraternities, Delta Theta Phi, Phi Alpha Delta and Phi Delta Phi, have been established at the Law School. Through their professional programs and social activities, members of the student body have the opportunity to develop professionally and to interact socially with members of the bench, bar, Law School faculty and fellow students.

Missouri Association of Trial Attorneys (MATA)

The UMKC MATA chapter was formed with the basic ideals of the statewide organization and the national organization, known as the Association of Trial Lawyers of America. These ideals and goals include seeking justice, protecting those who deserve redress from injury, promoting the public good through concerted efforts to secure safe products, and upholding the honor and dignity of the legal profession.

Midwestern Innocence Project Student Organization

MIPSO was established to assist the Midwestern Innocence Project in its efforts to seek the exoneration of those who are incarcerated but are actually innocent. MIPSO helps MIP in its fund-raising activities and plans speakers and other programs to educate the law school community about the problem of wrongful convictions.

Moot Court Board

Students who wish to further develop their appellate argument abilities may participate in the school's Appellate Advocacy Program, which is administered by a student moot court board under the general supervision of the faculty. The top 16 students in the Fall Appellate Advocacy II Competition are invited to participate in the Ellison Moot Court Competition, which provides the means for selection of students to represent the school in national appellate advocacy competitions. Membership on the board is open to students who participate in the Ellison Competition.

National Lawyers Guild

The National Lawyers Guild is a nationwide organization of lawyers, legal workers and law students with 96 chapters throughout the United States. It was founded in 1937 as the country's first integrated bar association. The guild is dedicated to seeking social justice, social equality and freedom to dissent to the end that human rights shall be regarded as more sacred than property interests.

Non-Traditional Law Students Association

The Non-Traditional Law Students Organization coordinates social and mutual-support events and initiates discussions with academic and administrative staff members who may be able to assist with matters unique to these individuals whose student lives are complicated by other, nontraditional roles, responsibilities and concerns.

Order of the Bench and Robe

The honor society of the Order of the Bench and Robe gives recognition to the attainment of superior scholarship and implements the ideals, growth and welfare of the Law School. Each year the law faculty inducts the top 10 percent of the senior class into its membership.

Public Interest Law Group

The purpose of the Public Interest Law Group at UMKC is to foster awareness by students, faculty, administrators and alumni of public-interest law through financial support, educational programs and community outreach. As a student-driven nonprofit organization, the group is dedicated to the principle that law students should be encouraged to work in the public interest and that no student or graduate who wants to work in public interest law should be unable to do so for economic reasons. The group is affiliated with the National Association for Public Interest Law and administers two primary program areas: grants for summer internships: and loan repayment assistance for graduates.

Securities Club

The purpose of the Securities Club of the School of Law is to explore and inform students of career options in the field of securities law. The Securities Club endeavors to meet its objectives by sponsoring speakers and workshops providing insight into the securities industry.

Sports and Entertainment Law Society

The purpose of the Sports and Entertainment Law Society of the School of Law is to explore and inform students of career options in the field of Sports and Entertainment Law.

Student Bar Association

The SBA is a member of the Law Student Division of the American Bar Association. It is headed by a student board of governors, which is elected annually. The board speaks for the student body as a whole, appoints committees and directs various extracurricular programs.

The \$1.98 Law Revue

This annual Law School theatrical production is written, produced, directed and presented by law students and faculty. It is a humorous look at the Law School, the law in general and current events. The show involves the combined talents of writers, actors, singers, stage hands, publicists, artists, makeup and costume artists, and musicians. The entire Law School community looks forward to the annual production.

Fee Information

Educational fees and student program/use fees are set by the University of Missouri Board of Curators. For the most recent fee schedule, please contact the Cashier's Office at (816) 235-**1365** or visit their Web site at http://www.umkc.edu/adminfinance/finance/cashiers.

Financial Aid

For information on financial aid, contact the UMKC Financial Aid and Scholarships Office at (816) 235-**1154** or visit their Web site at http://www.sfa.umkc.edu/.

Master of Laws Degree

Admissions

Eligibility for the LL.M. Program

The School of Law offers three graduate study programs in law leading to the master of laws degree: the LL.M. (taxation); the LL.M. (urban affairs); and the LL.M. (general). In addition, as part of the LL.M. (general) program, an estate planning concentration is available to qualified applicants. Admission is limited to applicants who have attained the juris doctor or equivalent degree from an approved law school and who have a law school grade-point average of at least 2.7 on a 4.0 scale.

Admissions Process

An LL.M. admission application, application fee and official law school and undergraduate transcripts must be submitted for admission. There is no formal application deadline, but early submission of applications is recommended.

Non-Degree Candidates

Post-J.D. study may be undertaken on a non-LL.M. basis. Applicants who wish to obtain an LL.M. degree but who do not have the required grade-point average may be permitted to enroll as a non-degree candidate. They may be considered for admission later to the degree program on the basis of performance in courses taken as a non-degree candidate.

Master of Laws Degree Requirements

- 1. Completion of 24 credit hours, 18 of which must be taken from the list of required and elective courses provided for each program;
- 2. A cumulative grade-point average of at least 3.0 (2.7 for the LL.M. [Taxation] and the LL.M. [General] with Estate Planning Concentration]). See the Administrative Rules and Regulations section that follows;
- 3. Completion of all required courses. See the "Required Courses" for each program;
- 4. Enrollment in a minimum of four credit hours each semester;
- 5. Successful completion of all coursework (including thesis, if applicable) within three years from the beginning of the course of studies leading toward the degree.

Upon enrollment in the graduate program, a student is assigned a faculty adviser. In consultation with the adviser, the student develops a plan of study that meets the requirements for the degree in the program area selected. The adviser must approve enrollment in all courses.

Combined J.D./LL.M. Degree Programs: J.D./LL.M. (Taxation) and J.D./LL.M (General) with Estate Planning Concentration

Program Description

Qualified J.D. students will be permitted to apply up to 10 credit hours (12 with the permission of the Graduate Studies Committee) of UMKC graduate courses approved for this purpose toward an LL.M. (Taxation) or LL.M. (General) with Estate Planning Concentration degree as well as toward a J.D. degree. This will allow students to earn such LL.M. on an accelerated basis, generally requiring only one additional semester (or two summer sessions) beyond that required for the J.D. degree.

Eligibility Requirements

To be eligible for either of the Combined J.D./LL.M. programs, students must:

- 1. Enroll in the program before they receive the J.D. degree;
- 2. Take the graduate courses at UMKC (courses taken at other schools will not be eligible);
- 3. Have a cumulative grade-point average of at least 2.7 (on a 4.0 scale) at the time of graduation from the J.D. program. See "Conditional Acceptance" below;
- 4. Satisfy all of the requirements for obtaining the applicable LL.M. degree.

Application to Enter the Program

An application form for the Combined J.D./LL.M. programs is available in the UMKC School of Law Administration Office. Students may apply as follows:

Persons applying to the J.D. program at the UMKC School of Law may apply to enter either of the Combined J.D./LL.M. programs with their J.D. application. No LL.M. courses may be taken until the student has completed all first-year courses.

Law students already enrolled at UMKC may apply at any time to enter either Combined J.D./LL.M. program, although no LL.M. courses may be taken until the student has completed all first-year courses.

Law Students Enrolled at other Law Schools

Transfer students from other law schools may apply to transfer to the UMKC School of Law and enroll in either J.D./LL.M. program as they pursue a J.D. at UMKC.

Visiting/Certification students may apply to the program in their fourth semester of law school and enroll at UMKC for their fifth or sixth semester as visiting/certification J.D. students. After receiving the J.D. degree from the student's "home" law school, the qualified student may continue at UMKC as an LL.M. student. See "Conditional Acceptance" below. It is incumbent upon visiting/certification students to ensure that the LL.M. courses taken at UMKC will be credited toward the J.D. degree at their "home" law school. Toward this end, law students interested in either Combined J.D./LL.M. program are encouraged to begin discussions with their law school toward this end as soon as possible in their J.D. studies.

Conditional Acceptance into the J.D./LL.M. Combined Degree Programs

Since an LL.M. program is a graduate program, no person can be formally accepted into the program until the successful completion of the J.D. degree. Consequently, students in either J.D./LL.M. program will be conditionally accepted into the LL.M. program. Formal acceptance will depend on whether a student has met the minimum eligibility requirements to enroll in either LL.M. program (for example, a minimum law school grade-point average of 2.7 on a 4.0 scale on graduation from the J.D. program).

Requirements After Completion of the J.D. Program

During their post-J.D. degree period, Combined Degree program students are considered LL.M. students at the UMKC School of Law and are subject to the rules and regulations of the School applicable to LL.M. students.

Students participating in either Combined J.D./LL.M. program must complete at least 24 credit hours in graduate courses which must be taken at UMKC from the list of required and elective courses for the applicable program. Up to 10 credit hours (12 credits with the permission of the Graduate Studies Committee) of LL.M. courses taken at UMKC while a J.D. student may be applied to the 24 credit hour requirement.

Students must have an LL.M. cumulative grade-point average of at least 2.7 to receive either the LL.M. (Taxation) or the LL.M. (General) with Estate Planning Concentration degree.

Students must enroll in a minimum of 4 credit hours each semester and must complete the LL.M. degree requirements within three years of obtaining their J.D. degree.

Curriculum, Master of Laws (Taxation)

Curriculum, waster of Laws (laxation	I)
Required Courses (15 credit hours)	
Law 834 Tax Procedure	(2)
Law 838R Tax Practicum OR	(1)
Law 746R Tax Research	
Law 886 Corporate Taxation I	(3)
Law 887 Corporate Taxation II	(3)
Law 888R Partnership Taxation	(3)
Law 893R Taxation of Property Transactions	(3)
Elective Tax Courses	
Law 611R Dispositions and Succession Planning	(1)
of Business Interests	
Law 612R Estate Planning with Life Insurance	(1)
Law 613R Special Problems in Estate Planning	(1)
Law 614R Estate Planning for Retirement Plan	(1)
Benefits	
Law 615 Estate Planning and Practice	(2-3)
Law 615R Estate Planning for Charitable Giving	(1)
Law 616R Fiduciary Administration for Estate	(1)
Planners	
Law 617R Elder Law for Estate Planners	(2-3)
Law 746R Independent Study (tax topic)	(2) (2)
Law 757R Entrepreneurial Clinic	(2)
Law 834R Tax Clinic	(1-3)
Law 838 Tax Accounting	(1-3)
Law 838R Tax Practicum	(1)
Law 843 Federal Income Taxation of Trusts and	(2)
Estates	
Law 845 Deferred Compensation	(2)
Law 848R State and Local Taxation	(2-3)
Law 874 Tax-Exempt Organizations	(2) (3)
Law 889 International Taxation	(3)
Law 892R Taxation of Estates, Gifts and Trusts	(3)
Law 868R Valuation for Transfer Tax Purposes	(3)
Law 894R Tax Aspects of Bankruptcy	(2)
Other Courses	

Other Courses

The UMKC graduate studies committee may approve up to 6 credit hours from other UMKC Law School course offerings or from the interdisciplinary offerings of other UMKC graduate and professional schools. However, such courses may not be required or basic bar examination J.D. courses.

Curriculum, Master of Laws (General)

Program Requirements

There are no specific course requirements. Rather, the course of studies is one developed by the student and his/her adviser based upon a set of courses related to a specific thematic goal and approved by the graduate studies committee. It must include a thesis related to the subject area chosen.

Jurisprudential Requirement

Students must take one jurisprudential course approved by their adviser.

Thesis Requirement

A minimum of 4 and a maximum of 8 credit hours (to be determined by students in consultation with their thesis adviser) may be given for a written thesis on a subject approved by the student's thesis committee. The thesis must show substantial evidence of original research or development of the principles of at least one interdisciplinary field related to

the student's thematic goal; be at least 75 pages in length; and be of high scholastic quality, suitable for publication as a lead article in a scholarly journal.

The thesis committee, consisting of the thesis adviser (selected by the student with the adviser's consent) and the UMKC School of Law graduate studies committee, must approve the topic and the final form and substance of the thesis.

Other Courses

The UMKC Law School graduate studies committee may approve up to 6 credit hours of courses in other schools and departments of the University related to the student's thematic goal. Generally, students may not take required or basic bar examination J.D. courses for graduate credit.

Curriculum, Master of Laws (General) with Estate Planning Concentration

Required Courses (17 credit hours)

Requirea Courses (17 create nours)	
Law 603 Taxation of Business Organizations	(3)
Law 615 Estate Planning and Practice	(3)
Law 618R Drafting and Preparation of Estate	(2)
Plans	
Law 800 Thesis	(4-8)
Law 838R Tax Practicum	(1)
Law 843 Federal Income Taxation of Trusts &	(1) (2)
Estates	
Law 868R Valuation for Transfer Tax Purposes	(3)
Law 892R Taxation of Estates, Gifts and Trusts	(3) (3)
Elective Courses	
Law 611R Dispositions and Succession Planning	(1)
of Business Interests	
Law 612R Tax Planning with Life Insurance	(1)
Law 613R Special Problems in Estate Planning	(1)
Law 614R Estate Planning for Retirement Plan	(1)
Benefits	. ,
Law 615R Estate Planning for Charitable Giving	(1)
Law 616R Fiduciary Administration for Estate	(1)
Planners	
Law 617R Elder Law for Estate Planners	(1)
Law 757R Entrepreneurial Clinic	(2)
1	` '

Thesis Requirement

A minimum of 4 and a maximum of 8 credit hours (to be determined by the student in consultation with the thesis adviser) may be given for a written thesis on a subject approved by the student's thesis committee. The thesis must show substantial evidence of original research or development of the principles of at least one interdisciplinary field related to the student's thematic goal; be at least 75 pages in length; and be of high scholastic quality, suitable for publication as a lead article in a scholarly journal.

The thesis committee, consisting of the thesis adviser (selected by the student with the advisers consent) and the UMKC School of Law graduate studies committee, must approve the topic and the final form and substance of the thesis.

At the option of the Director of the Estate Planning Program, the thesis requirement may be met by satisfactory completion of Law 618R and Law 746R (for 2 credit hours), requiring the student to research and write a substantial original work in the estate planning field.

Other Courses

The UMKC graduate studies committee may approve up to 6 credit hours from other UMKC Law School course offerings or from the interdisciplinary offerings of other UMKC graduate and professional schools. However, such courses may not be required or be basic bar examination J.D. courses.

Curriculum, Master of Laws (Urban Affairs)

Because of the complexity and diversity of their setting, urban problems sometimes transcend traditional legal solutions. The interdisciplinary Urban Legal Affairs Program prepares lawyers for specializing in practice, public service and corporate and financial institutions dealing with metropolitan-area problems. Students may pursue the areas of Planning and Governance; Environment and Natural Resources; and Real Estate Development.

Courses Available

Law 732 Alternative Dispute Resolution	(2-3)
Law 898 Construction Law	(2)
Law 773 Environmental Law	(2-3)
Law 766 Land Use Planning	(2-3)
Law 728 Law and the American Indian	(2-3)
Law 641R Legislation	(2-3)
Law 783 Natural Resources Law	(2-3)
Law 729 Preservation Law	(2-3)
Law 861 Real Estate Finance	(3)
Law 875 Real Estate Transactions	(2-3)
Law 862 Seminar in Urbanization	(2)
Law 770 State and Local Government Law	(2-3)

Thesis

If elected, a minimum of 4 and a maximum of 8 credit hours (to be determined by the student in consultation with the thesis adviser) may be given for a written thesis on a subject approved by the student's thesis committee. The thesis must show substantial evidence of original research or development of the principles of at least one interdisciplinary field related to the area of urban studies pursued; be at least 75 pages in length; and be of high scholastic quality, suitable for publication as a lead article in a scholarly journal.

The thesis committee, consisting of the thesis adviser (selected by the student with the adviser's consent) and the School of Law graduate studies committee must approve the topic and the final form and substance of the thesis.

Other Courses

The School of Law graduate studies committee may approve other law school courses and up to 6 credit hours of courses in other schools and departments of the University related to the area of urban affairs pursued. Generally, students may not take required or basic bar examination J.D. courses for graduate credit.

Before enrollment, the student will work with the associate dean for faculty services toward developing an individualized urban affairs course of studies.

LL.M./M.P.A. Joint Degree Program

A joint LL.M./M.P.A. degree program between the School of Law and the Henry W. Bloch School of Business and Public Administration can be arranged with the approval of the Law School graduate studies committee.

Administrative Rules and Regulations

Attendance, Examinations and Grades, and Withdrawal from Courses

The administrative rules and regulations set forth for the juris doctor degree program covering these matters also apply to the master of laws degree programs.

Scholastic Probation and Dismissal

A student will be placed on scholastic probation whenever the student's grade-point average falls below 3.0 (2.7 for the LL.M. [Taxation] degree and LL.M. [General] with Estate Planning Concentration degree). A student on probation must attain an overall 3.0 GPA (2.7 for the LL.M. in [Taxation] and LL.M. [General] with Estate Planning Concentration) by the end of the next semester of coursework, or, unless an exception is made by the Graduate Studies Committee, the student will be dismissed from the program for academic deficiency.

Fee Information

Educational fees and student program/use fees are set by the University of Missouri Board of Curators. For the most recent fee schedule, please contact the Cashier's Office at (816) 235-**1365** or visit their Web site at http://www.umkc.edu/cashiers.

Financial Aid

For information on financial aid, contact the UMKC Financial Aid and Scholarships Office at (816) 235-**1154** or visit their Web site at http://www.umkc.edu/finaid.

Scholarships

Arthur Mag Graduate Law Fellowship

In recognition of Arthur Mag's service to the University of Kansas City and UMKC, the Edward F. Swinney Trust has provided a grant for the establishment of Arthur Mag graduate fellowships to support full-time graduate study at UMKC. Arthur Mag Fellows work closely with distinguished professors in their graduate degree programs. These professors serve as mentors throughout the fellows' graduate work.

One of these fellowships is designated for the School of Law, and is provided each year to an outstanding student in the School of Law's LL.M. program.

The Arthur Mag Graduate Fellowship in Law includes a stipend of \$10,500 for the 2002-2003 academic year; remission on non-resident fees, if applicable; and remission of 9 hours of graduate law educational fees each semester; for a total possible compensation of nearly \$24,000.

Applications should be submitted to the Associate Dean, School of Law. **The application deadline for each academic year is February 3.** Applicants must be U.S. citizens who are planning to pursue the graduate program on a full-time basis.

More information, including a "generic" application form that may be copied and used and a faculty recommendation form, may be obtained/downloaded from the School of Graduate Studies Web site at: http://www.umkc.edu/sgs.

John B. Gage Memorial Fellowships

Fellowship awards are provided annually to outstanding students entering as full-time LL.M. degree candidates from a fund endowed by friends of alumnus John B. Gage, a teacher of law, former mayor of Kansas City and eminent lawyer.

Minority Graduate Student Fellowships

The UMKC School of Graduate Studies annually awards up to three Minority Graduate Fellowships of \$600 each, applicable to the student's graduate educational fees. The fellowship is renewable for one additional year provided the student maintains a 3.0 grade-point average and the law school certifies that the student is in good standing and making normal progress toward the degree. Those eligible for nomination for these fellowships at the law school include blacks, Hispanics, Native Americans and Asian Americans who are degree-seeking LL.M. students admitted or enrolled at UMKC for the ensuing academic year and who are U.S. citizens. Fellows must maintain a minimum enrollment of 6 credit hours per semester.

UMKC Graduate Tax Law Foundation Scholarship

The Graduate Tax Law Foundation provides an annual cash award to outstanding LL.M. (Taxation) students and outstanding J.D. tax students.

Alphabetical Course Listing

The following is an alphabetical listing of courses available to students. Certain courses are offered on an every-other-year basis and others are not offered regularly. Descriptions of the courses are contained in the following section. Based on current expectations and recent experience, courses that have (*Reg*) after their name are expected to be offered at least once

every two years and are therefore likely to be offered to a student during his or her tenure at the School of Law. Courses that have (*Sum*) after their name are offered in the School's Summer Abroad programs.

summer Abroau programs.		
Administrative Law	(Reg)	Law 764
Advanced Legal Research		Law 643
Advanced Lawyering Processes	(Reg)	Law 710
Advanced Legal Writing:		Law 707B
Corporate Drafting		
Advanced Legal Writing:	(Reg)	Law 707C
Litigation Drafting	-	
Advanced Legal Writing: Practical		Law 707A
Skills Development		
Air, Water and Waste Regulation		Law 717
Alternative Dispute Resolution		Law 732
American Legal History	(Reg)	Law 730
Animal Law		Law 665A
Antitrust and Competition Law		Law 605
Appellate Advocacy II		Law 747
Appellate Advocacy III	(Reg)	Law 748
Appellate Advocacy IV	(Reg)	Law 775
Appellate Process	(Reg)	Law 740S
Applied Professional Responsibility:	(Reg)	Law 638
Law Practice Management		1 070
Bankruptcy Reorganization Seminar		Law 879
Bankruptcy Court Clerkship		Law 877
Business Organizations	(Reg)	Law 601
Business Planning	(Reg)	Law 757
Business Torts and Unfair Competition		Law 797
Child and Family Services Clinic	(Reg)	Law 752S
Children in the Law		Law 733
Chinese Law	(Sum)	Law 738R
Civil Procedure I	(Reg)	Law 521
Civil Procedure II	(Reg)	Law 522
Civil Rights		Law 791
Commercial Transactions	(Keg)	Law 721
Communications Law	(\mathbf{P}_{aa})	Law 860
Comparative Law Complex Litigation	(Keg)	Law 743
Complex Litigation Computers and the Law	(Reg)	Law 706 Law 716
Conflict of Laws		
Constitutional Law I: The Supreme	(Reg)	Law 702 Law 631
Court and the Bill of Rights	(neg)	Law 051
Constitutional Law II:	$(R\rho\sigma)$	Law 632
Powers of Government	(nes)	Euw 052
Construction Law	$(R\rho\sigma)$	Law 898
Consumer Bankruptcy	(nes)	Law 880
Consumer Protection	(Reg)	Law 858
Contracts I	(Reg)	Law 501
Contracts II	(Reg)	Law 502
Corporate Taxation I	(Reg)	Law 886
Corporate Taxation II	(Reg)	Law 887
Court Clerkship		Law 662
Criminal Sentencing Law Practice &	(Reg)	Law 635R
Procedure	0/	
Criminal Law	(Reg)	Law 634
Criminal Procedure I	(Reg)	Law 635
Criminal Procedure II	(Reg)	Law 636
Criminal Trial Techniques	(Reg)	Law 820
Current Issues in Property Law Seminar	-	Law 542
Death Penalty Clinic	(Reg)	Law 713
Debtor-Creditor Rights	(Reg)	Law 736
Defamation, Privacy, Relational &	(Reg)	Law 513
Emotional Torts		
Deferred Compensation		Law 845
Department of Labor Clinic	(Reg)	Law 768R
Disabilities and the Law		Law 815R
Dispositions and Succession Planning	(Reg)	Law 611R
of Business Interests	(0)	L (01D
Doing Business in Northern Ireland	(Sum)	Law 601R

Doing Business in the Republic of	(Sum)	Law 736R
Ireland		
Drafting and Preparation of	(Reg)	Law 618R
Estate Plans		I. 706
Economics and the Law		Law 796
Education Law: Government & Legal		Law 870R
Aspects of Education Elder Law for Estate Planners	(\mathbf{D}_{ac})	Law 617R
Employment Discrimination Law	(Reg) (Reg)	Law 813
Employment Law	(Reg)	Law 814R
English Legal History	(1108)	Law 737
Entertainment Law		Law 890R
Entrepreneurial Law & Practice Clinic	(Reg)	Law 757R
Environmental Law	(Reg)	Law 773
Environmental Law Clinic	(Reg)	Law 773R
Environmental Law Seminar	(Reg)	Law 782
Estate & Gift Taxation	(Reg)	Law 787
Estate Planning & Drafting	(Reg)	Law 614
Estate Planning & Practice	(Reg)	Law 615
Estate Planning for		Law 891
Closely-Held Businesses Estate Planning for Charitable Giving	(Reg)	Law 615R
Estate Planning with Life Insurance	(Reg)	Law 612R
Estate Planning for Retirement Plan	(Reg)	Law 614R
Benefits	(1108)	Lui of ite
Estates & Trusts	(Reg)	Law 611
Ethical Issues in Family Law	(Reg)	Law 609
Representation		
Evidence	(Reg)	Law 621
Family Law	(Reg)	Law 751
Family Law Clerkship	(Reg)	Law 662F Law 752R
Family Law Practice Family Violence	(Reg) (Reg)	Law 751S
Federal Criminal Law	(neg)	Law 637
Federal Income Taxation of Estates &	(Reg)	Law 843
Trusts	('0)	
Federal Jurisdiction		Law 765
Federal Public Defender Externship	(Reg)	Law 656F
Clinic		
Federal Taxation	(Reg)	Law 552
First Amendment Law	(Reg)	Law 633
Future Interests From the Early		Law 649
Common Law to the Present Gender and Justice	(Reg)	Law 714
Gun Law Seminar	(neg)	Law 792S
Human Rights Enforcement Seminar		Law 830S
Immigration Law and Process	(Reg)	Law 738
Independent Study	(Reg)	Law 746R
Insurance	(Reg)	Law 760
Intellectual Property Law	(Reg)	Law 808
International Business Transactions	(C)	Law 754
International Human Rights Law	(Sum)	Law 831R
International Environmental Law International Law	(Reg) (Reg)	Law 773I Law 753
International Law Seminar	(Reg)	Law 831
International Taxation	(Reg)	Law 889
Introduction to Law and	(Reg)	Law 531
Lawyering Processes I	(0/	
Introduction to Law and	(Reg)	Law 532
Lawyering Processes II		
Jurisprudence	(Reg)	Law 744
Juvenile Offenders and the Law	(Reg)	Law 733R
Labor Law Land Use Planning	(Reg) (Reg)	Law 763 Law 766
Law and Literature	(Reg)	Law 781
Law and Mental Illness	(Reg)	Law 825
Law and the American Indian	(Reg)	Law 728
Law of Information Technology	(Sum)	Law 808R
Law of International Trade & Finance	(Reg)	Law 832
Law of the European Union (Part I)	(Sum)	Law 735R
Law of the European Union (Part II)	(Sum)	Law 737R
Law Review		
Law Keview	(Reg)	Law 745

Law Review Board	(Reg)	Law 745R
Leadership in Disability Studies: A		Law 815S
Multidisciplinary Approach		
Legal Aid Clinic	(Reg)	Law 790
Legal Research	(Reg)	
Legal Research (Thesis)		Law 800
Legislation		Law 641R
Mediation	(Reg)	Law 734
Mental Health Law	(Reg)	Law 754 Law 761R
	· - 0/	
National Labor Relations Board Clinic	(Reg)	Law 768
Natural Resources Law	(Reg)	Law 783
Negotiating Mergers & Acquisitions	(Reg)	Law 837
Partnership Taxation	(Reg)	Law 888R
Preservation Law	(Reg)	Law 729
Problems and Issues in the	(Reg)	Law 712
Death Penalty		
Problems in Bankruptcy		Law 807
Products Liability		Law 815
Professional Malpractice Litigation	(Reg)	Law 846
Professional Responsibility	(Reg)	Law 731
Property I	(Reg)	Law 541
Property II	(Reg)	Law 542
Public Defender Trials Clinic	(Reg)	Law 656
	(neg)	
Race and the Law Seminar		Law 650
Real Estate Finance	(Reg)	Law 861
Real Estate Transactions	(Reg)	Law 875
Remedies	(Reg)	Law 711
Sales and Leasing	(Reg)	Law 709
Scientific Evidence & Opinion		Law 853
Testimony		
Secured Transactions	(Reg)	Law 720
Securities Regulation		Law 758S
Seminar in Constitutional		Law 826
• • • •	(neg)	Law 020
Interpretation Seminar in Famous Trials	(\mathbf{P}_{aa})	L on 735
	(Reg)	
Seminar in Legal Education		Law 897
Seminar in Philosophy and Law	(Reg)	
Seminar in Sex Offenders, Law,		Law 840R
and Public Policy		
Seminar in The Arts of Lawyering		Law 662R
and Judging		
Seminar in The Ethics of		Law 820R
Criminal Advocacy		
Seminar in Urbanization		Law 862
Seminar on the Supreme Court	(Reg)	Law 881
Seminar on the Urban Environment	(neg)	Law 750R
Social Security Administration	$(\mathbf{R}_{\mathbf{a}\mathbf{a}})$	Law 867R
	(Reg)	Law 60/K
Law Clinic		I. (12
Special Problems in Estate Planning		Law 613
Sports Law	IRPOL	Law 890
State and Local Government Law	(nes)	1 770
State and Local Tayation	(Reg)	Law 770
State and Local Taxation	(Reg)	Law 770 Law 848R
	(Reg)	Law 770 Law 848R Law 889R
Subchapter S Taxation Tax Accounting	(Reg)	Law 770 Law 848R
Subchapter S Taxation	(Reg)	Law 770 Law 848R Law 889R Law 838
Subchapter S Taxation Tax Accounting Tax Clinic	(Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations	(Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R Law 603
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts	(Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R Law 603 Law 892R
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions	(Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R Law 603 Law 892R Law 893R
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations	(Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax Planning with Life Insurance	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874 Law 612R
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874 Law 612R Law 838R
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum Tax Procedure	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R Law 603 Law 892R Law 892R Law 893R Law 874 Law 612R Law 838R Law 834
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum Tax Procedure The Jury: Practice and Perspectives	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874 Law 612R Law 838R Law 834 Law 895
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum Tax Procedure The Jury: Practice and Perspectives Torts	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 889R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874 Law 612R Law 838R Law 834 Law 895 Law 511
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum Tax Procedure The Jury: Practice and Perspectives Torts Trial Advocacy I	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 848R Law 838 Law 834R Law 803 Law 892R Law 893R Law 874 Law 612R Law 834 Law 834 Law 895 Law 511 Law 700
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum Tax Procedure The Jury: Practice and Perspectives Torts Trial Advocacy I Trial Advocacy I	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 848R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874 Law 612R Law 834 Law 834 Law 895 Law 511 Law 700 Law 703
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum Tax Procedure The Jury: Practice and Perspectives Torts Trial Advocacy I Trial Advocacy II Trial Advocacy III	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 848R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874 Law 612R Law 834 Law 834 Law 834 Law 511 Law 700 Law 703 Law 705
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum Tax Procedure The Jury: Practice and Perspectives Torts Trial Advocacy I Trial Advocacy I	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 848R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874 Law 612R Law 834 Law 834 Law 895 Law 511 Law 700 Law 703
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum Tax Procedure The Jury: Practice and Perspectives Torts Trial Advocacy I Trial Advocacy II Trial Advocacy II Trusts: Planning, Drafting, Administering and Litigating	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 848R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874 Law 612R Law 834 Law 834 Law 834 Law 511 Law 700 Law 703 Law 705
Subchapter S Taxation Tax Accounting Tax Clinic Taxation of Business Organizations Taxation of Estates, Gifts and Trusts Taxation of Property Transactions Tax-Exempt Organizations Tax Planning with Life Insurance Tax Practicum Tax Procedure The Jury: Practice and Perspectives Torts Trial Advocacy I Trial Advocacy II Trial Advocacy III	(Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg) (Reg)	Law 770 Law 848R Law 848R Law 838 Law 834R Law 603 Law 892R Law 893R Law 874 Law 612R Law 834 Law 834 Law 834 Law 511 Law 700 Law 703 Law 705

U.S. Environmental Protection Agency Law Clinic: National Agricultural Compliance Assistance Center	(Reg)	Law 782R
U.S. Environmental Protection Agency Law Clinic, Region VII	(Reg)	Law 782S
Urban Lawyer Staff Urban Lawyer Board Valuation for Transfer Tax Purposes Water Law White Collar Crime Workshop on Current Issues in	(Reg) (Reg) (Reg) (Reg) (Reg)	Law 750 Law 750B Law 868R Law 725 Law 884 Law 778
Family Law Wrongful Convictions I Wrongful Convictions II	(Reg) (Reg)	Law 635S Law 635T

School of Law Courses

501 Contracts I (3). Formation and performance of simple contracts; consideration; express and constructive conditions, excuse of conditions; remedies for breach; contracts for benefit of third parties; assignment; impossibility of performance and discharge.

502 Contracts II (3). Continuation of Law 501.

511 Torts (3). Wrongs to the person and to property; legal remedies through which compensation or other relief may be obtained.

513 Defamation, Privacy, Relational & Emotional Torts (2-3). A focus on word torts, emotional injuries, and torts stemming from relational duties of care. Defamation topics covered will include private and public official and public figure plaintiffs, as well as tactical aspects of defamation actions and privileges. Privacy torts explored will be false light, public disclosure of private facts, intrusion and seclusion, and appropriation of name or likeness. The majority of the course will involve coverage of special or limited duties of care arising from contractual or professional relationships (such as medical and legal malpractice), landowner liability, sexual harassment in employment, familial and governmental immunities, prenatal injuries, negligent infliction of emotional distress, as well as theories of vicarious liability for the torts of others.

515 Alternative Compensation Systems (3). An exploration and comparison of three alternative compensation systems for personal injuries; the traditional tort system (using the example of toxic torts), an insurance-based system (using the example of automobile accidents), and a no-fault system (using the example of workers compensation). Students will study relevant statutes, legal doctrines, and cases pertaining to each of the three compensation systems as well as the legal and policy objectives of each system, and their respective advantages and disadvantages. Topics to be covered include: advanced theories of nuisance, trespass, negligence and strict liability; damages and their calculation; causation issues; multiple parties and vicarious liability; mandatory financial responsibility; insurance coverage, first-party and third-party insurance differences and no-fault insurance; statutory regulation of injuries and compensation; statutory interpretation; exclusivity of the statutory remedy.

521 Civil Procedure I (3). Court systems; jurisdiction; venue; pleadings; parties; claims; intervention; class actions; choice of law.

522 Civil Procedure II (2-3). Motion practice; summary judgment; pre-trial conference; discovery; jury selection, summations, instructions, verdict; judgments and estoppel; appeals.

531 Introduction to Law and Lawyering Processes I (3). Introduction to legal reasoning; case analysis and synthesis; case research; structure and style in legal writing with emphasis on expository writing, including office memoranda.

532 Introduction to Law and Lawyering Processes II (2-3). Introduction to advocacy; introduction to interviewing, counseling and negotiation; statutory and computerized research; writing to and on behalf of a client, including a trial or appellate brief; oral advocacy.

541 Property I (3). Introduction to the nature of property; basic personal property law; adverse possession; possessory estates; basic future interests; marital and concurrent interests; landlord-tenant relationships.

542 Property II (3). Licenses, easements, real covenants, equitable servitudes; nuisances; basic water law; brokerage; financing, mortgages, deeds of trust; contract of sale, deeds, closing; title insurance, warranties; recording; eminent domain; zoning.

542R Current Issues in Property Law Seminar (2-3). Exploration of an issue in the area of real or personal property from an advanced perspective.

552 Federal Taxation (3). Theory, history, and principles of federal income taxation; basic concepts of income, classification of income and deductions.

601 Business Organizations (4). Partnership, limited liability company and corporation law; choice of business forms, formation of partnerships, limited liability companies and corporations; rights, duties, and powers of partners, members, shareholders, directors, and officers; closely held corporations; proxy regulation; derivative suites; dividends and stock redemptions; introduction to the Securities Act of 1933 and Securities Exchange Act of 1934.

601R Doing Business In Northern Ireland (1). An introduction to the corporation laws of the United States applicable to foreign investment by American multinational companies coupled with a survey of the Company Law of Northern Ireland (UK) and foreign incentives and taxation of companies in Northern Ireland.

603 Taxation of Business Organization (2-3). Survey course of the taxation of business enterprises, particularly partnerships, corporations and subchapter S corporations. Prerequisites: Federal Taxation and Business Organizations.

605 Antitrust and Competition Law (2-3). This course studies how antitrust laws work to create an environment in which free and open competition thrives. Course examines how antitrust laws seek to prevent unreasonable horizontal (competitors) and vertical (supply chain) restraints that harm consumers and to deal with markets where one competitor has attained monopoly power, conduct that is specifically exempted from antitrust regulation, who is entitled to seek redress for antitrust violations, and particular issues unique to antitrust litigation.

609 Ethical Issues in Family Law Representation (1-2). Advanced study of the ethical obligations of public and private attorneys in estate, family, and juvenile law representation. Topics may include identification of the client, ethical and legal obligations of confidentiality and disclosure, competence and client communication, respect for third persons (particularly obligations toward children of clients) and other related subjects. Paper and presentation required. Pre-requisite: Professional Responsibility. Pre or co-requisites: Estates and Trust and Family Law. Limited Enrollment.

611 Estates and Trusts (3-4). Intestate succession; testamentary dispositions; execution, modification, and revocation of wills; will contests; advancements, ademption, and exoneration; family allowances; rights of estate creditors; express, implied, resulting, and constructive trusts; basic tax aspects of estates and trusts; rule against perpetuities; will substitutes.

611R Dispositions & Succession Planning of Business Interests (1). Survey of the management and structure of closely held business and the shifting of ownership through various business disposition methods, including intervivos gifting, installment sales, private annuities, self-canceling notes, sales of business interests to defective grantor trusts and buy/sell agreements at death. This course will cover the income, gift and estate tax consequences associated with the various succession planning techniques. The impact of the OID rules on the gift and estate tax consequences will be explored.

612R Tax Planning With Life Insurance (1). An examination of the various tax consequences of using life insurance, including issues relating to the income, gift and estate tax consequences of life insurance ownership by an individual, and irrevocable trust, or business entity.

614 Estate Planning and Drafting (3-4). Continuation of Estates & Trusts I using problems and cases as a basis for class discussion. Working in teams, students engage in the planning of estates for actual clients, proceeding through the entire process and culminating in the execution of wills, trusts or other appropriate instruments. Course is not open to students who have taken Estate Planning. Prerequisite: Estates & Trusts I.

614R Estate Planning For Retirement Plan Benefits (1). The income, gift, estate and generation-skipping transfer tax consequences and rules related to the ownership, distribution and withdrawal of retirement plan benefits, including minimum required distributions, designating beneficiaries, spousal rights and rollover options

615 Estate Planning and Practice (2-3). Tax-oriented examination of contemporary estate planning problems for the larger estates, with emphasis on issues of direct concern to practitioners. This course is designed for LL.M. students. Others may take the course with permission of the Associate Dean.

615R Estate Planning For Charitable Giving (1). Survey of federal income tax and transfer tax laws governing gifts to charitable organizations, charitable remainder trusts and charitable lead trusts; procedural requirements to assure deductibility; and planning and drafting considerations.

617R Elder Law For Estate Planners (1). An examination of the legal tools available for the elderly client for decision-making, both health care and financial, in the event of incapacity, and asset preservation, including Medicare and Medicaid qualification. The course will cover the use of trust; durable powers of attorney, and advance directives for health care and living wills and the relationship to court guardianship.

618R Drafting and Preparation of Estate Plans (2). This course will teach the student to apply the principles of income, gift, estate, and generation-skipping taxes to specific client needs and synthesize an appropriate

estate plan for the client; identify tax and non-tax issues that apply to a specific client and focus on effective communication to convey complex estate planning documents that accomplish the client's goals. The course assumes a general knowledge of income, gift estate and generation-skipping taxes.

621 Evidence (3). General principles relating to proof of facts in civil and criminal trials; presumptions; order of proof; relevancy; judicial notice; real and demonstrative evidence; authentication; best evidence rule; hearsay; competency; impeachment; rehabilitation.

631 Constitutional Law I - The Supreme Court and the Bill of Rights (3). The origin and nature of judicial review, substantive due process in regard to regulation of economic affairs, retroactive legislation, inviolability of the person, freedom of expression and assembly, freedom of religion, equal protection of the laws, the electoral process, nationality and citizenship.

632 Constitutional Law II - Powers of Government (2-3). State and Federal constitutions; separation of powers; executive powers, legislative powers; the federal system; powers of Congress, residual powers of the states; relations between the States including extradition and interstate commerce.

633 First Amendment Law (2-3). Basic themes and advanced problems relating to the law of the First Amendment to the United States Constitution, including exploration of the values behind the protection, subversive advocacy, regulation of speech in the public forum, access to the media, regulation of the press, symbolic expression, libel, obscenity, commercial speech, picketing, right of association, loyalty oaths, legislative investigations and government demands for information, separation of church and state, free exercise of religion, state aid to the religious schools, regulation of religion-based conduct.

634 Criminal Law (3). Introduction to substantive criminal law, its role and purpose in our society; principles of liability, common law and statutory offenses; defenses; punishment.

635 Criminal Procedure I (3). Introduction to the administration of criminal justice; constitutional rights of the accused; due process; privilege against self-incrimination; right to counsel; arrest, search, and seizure; wire-tapping; police interrogation and confessions; pre-trial identification procedures.

635R Criminal Sentencing: Law Practice & Procedure (2-3). Study of sentencing issues and practice, including theories of crime and punishment, jurisdictional and constitutional issues, sentencing systems, sentence types and alternatives, and procedural issues; in-depth analysis of sentencing guidelines.

635S Wrongful Convictions I (2-3). Interdisciplinary examination of the causes of wrongful convictions, remedied for those wrongfully imprisoned, and proposals for reforms. Topics include eyewitness identification use of informants, prosecutorial and police misconduct, scientific evidence (DNA, junk science), false confessions, incompetent lawyering compensation and media and investigative journalism, all with a focus on wrongful conviction. Students will have an opportunity to work on screening of inmate files to identify possible cases of wrongful conviction. Paper required. 2 credits. Limited Enrollment.

635T Wrongful Convictions II (2-3). A follow-up class to Wrongful Convictions I, open only to students who have completed Wrongful Convictions I. The course will involve "hands on" work with cases that have passed through the first level of screening in Wrongful Convictions I with students receiving the transcripts and case documents in addition to the briefs and opinion in the case. Students will receive these documents and report on the likelihood that an inmate is innocent and the strategies available for pursuing the claim of innocence.

636 Criminal Procedure II (2-3). Continuation of the study of the administration of criminal justice; exclusionary rules; bail; prosecutor's discretion; grand jury; preliminary hearing; jurisdiction, venue; joinder and severance of offenses and defendants; right to speedy trial; pleas of guilty; discovery; trial by jury; publicity; double jeopardy.

637 Federal Criminal Law (2). Jurisdiction and responsibilities of federal law enforcement agencies, bases for federal criminal jurisdiction and federal/state relationships in the enforcement of criminal statutes. Specific federal criminal statutes, case law and policy considerations are studied in the following areas: Racketeer Influenced and Corrupt Organizations (RICO); schemes to defraud (mail, wire, securities and bank fraud); drug offenses; tax prosecutions; currency reporting and transaction offenses; fraud against and false statements to federal agencies.

637R U.S. Attorney's Office Law Clinic (2-3). Up to four students, under supervision of an Assistant United States Attorney, are selected as interns to work in the United States Attorney's Office for the Western District of Missouri with members of the Strike Force, Narcotic Unit, General Crimes Unit or Civil Division. Activities include, legal research and writing, consisting of memoranda, motions and briefs; observations and participation in trials, pre-trial hearings and motions, as appropriate; and assistance with litigation. Students are expected to work a pre-approved schedule of six hours a week for fourteen weeks with a minimum of eighty hours a semester and to attend regular conferences with their supervising attorney and faculty

supervisor. Prerequisites: Three semesters of law school and attainment of at least a B+ cumulative grade point average. Eligible interested students are screened and selected. Ungraded. Pass/Fail.

638 Applied Professional Responsibility: Law Practice Management (1). Law practice management in the context of applied professional responsibility, including: organizational structure, fee setting and allocation, trust accounting, systems for avoiding conflict of interest, insurance, work control systems, obligations of supervisory and subordinate lawyers. Prerequisite: Professional Responsibility during the same semester.

641R Legislation (2-3). This course explores a variety of topics under the broad heading of "Legislation." Included among them are: electoral and representational structures, legislative drafting, canons of statutory interpretation, identifying and utilizing legislative history, the role of referendums and initiatives as a supplement to representative institutions, public choice theory, and other theories of legislation. The course also includes an opportunity for students to participate in the drafting of legislation for the Kansas for Missouri State legislatures. Paper optional.

643 Advanced Legal Research (2-3). Course builds on Introduction to Law and emphasizes problem solving, systemic thinking about legal bibliography, and understanding of the issues confronting legal research. Topics include additional Lexis and Westlaw instruction, web-based research, transactional law, tax law, litigation, statistics, government agencies, international and foreign law, business intelligence and a specialty topic chosen by the student. Course work includes research problems and exercises and creation of a legal research guide.

649 Future Interest From the Early Common Law to the Present (2). Course explores the methods by which law is formed in society and the creation of the common law from 1066 A.D. to the present, by examining the role that future interests in land played in the transfer of wealth and the evasion of taxes, the formation of equity and trusts, the evolution of the common law through stare decisis, writs, the forms of action and common law pleading, and the role of statutes and Parliament. The course will take us to modern times to compare Kansas and Missouri statutory and case law with the common law of future interests including: reversionary interests; determinable fees, fee tail, dower and dower substitutes; the rule against perpetuties; life estates, remainders and executory interests; general and special powers of appointment; trusts and equitable devices; worthier tile and descent, testamentary transfer conveyancing and assignment of interests. Paper required.

650 Race and the Law Seminar (2-3). In-depth examination of the role that race plays in American society as a whole and in judicial decision-making in particular. Coursr will examine the effect of race on representative democracy, employment, education, housing, hate crimes, the legal profession, sex, popular culture, and other aspects of the law. Research paper.

656 Public Defender Trials Clinic (3). As permitted by Missouri Supreme Court Rule 13, senior law students, under supervision, handle cases referred from the Public Defender. Students enroll for two semesters and are required to devote at least 10 hours per week to applied skills, weekly conferences, and lectures. Limited enrollment. Prerequisites: Criminal Law and Legal Writing I and II. Students must also have completed or be enrolled in Criminal Procedure I, Evidence, and Professional Responsibility. Ungraded. Pass/Fail.

656F Federal Public Defender Externship Clinic (2-3). Up to three students will be assigned to work in the Federal Public Defender's Office. Under the supervision of the Federal Public Defender, a student will prepare pleadings and represent federal ndigent criminal defendants. Students will be expected to perform legal research, to write memoranda, motions and briefs, to observe and to appropriately participate in trials, pre-trial hearings, motion hearings and, in general, to assist in litigation. Students must meet eligibility requirements and be certified in compliance with the Local Federal Rules of Court. Student will work a pre-approved schedule totaling 6 hours a week for 14 weeks with a minimum of 80 hours a semester for two academic credit hours and to attend regular conference with their Supervising Attorney and with their Faculty Supervisor. Students must have completed three semesters of law school and must be in the upper half of their class. Ungraded. Pass/Fail.

656R Federal Public Defender Externship Clinic (2-3). Up to three students will be assigned to work in the Federal Public Defender's Office. Under the supervison of the Federal Public Defender, a student will prepare pleadings and represent federal indigent criminal defendants. Students will be expected to perform legal research, to write memoranda, motions and briefs, to observe and to appropriately participate in trials, pre-trial hearings, motion hearings and, in general, to assist in litigation. Students must meet eligibility requirements and be certified in compliance with Local Federal Rules of Court. Student will work a pre-approved schedule totaling six hours a week for 14 weeks with a minimum of 80 hours a semester for two academic credit hours and to attend regular conferences with their Supervising Attorney and with their Faculty Supervisor. Students must have completed three semester of law school and must be in the upper half of their class. Ungraded. Pass/Fail.

662 Court Clerkship (2). Second or third-year students with a GPA of at least 3.0 serve in a clerkship with a judge or magistrate of the U.S. District Court for

the Western District of Missouri, or the U.S. Court of Appeals for the Eighth Circuit. Students work at least 70 hours at the court, and attend review conferences over the course of the semester. Ungraded. Pass/Fail.

662F Family Law Clerkship (2-3). Second or third-year students will serve as law clerks to judges and commissioners in the family court of Jackson County. Students work at least 80 hours at the court and attend review conferences over the course of the semester. Pass/Fail. Offered: Fall Semester 2001.

662R Seminar in the Arts of Lawyering & Judging (2-3). An examination of the arts of Lawyering and Judging considering the ideal and reality. Topics include advocacy, judging, and professionalism with special emphasis on current issues in the modern trial and appellate court, including the courtroom/courthouse of the future, the use of technology and management of high-profile and complex cases.

665A Animal Law (2). This course will begin with a brief overview of the philosophical and cultural issues underlying human/animal relationships, including basic theories of the legal systems's responses to social change. Legal issues relating to food animals, companion animals, laboratory animals, wild animals, and performing animals will be examined with reference to: (1) federal statues (Animal Welfare Act, Endangered Species Act, Marine Mammal Protection Act, Wild Horses and Burros Act, Animal Damage Control Act, National Wildlife Refuge System Administration Act, Refuge Recreation Act, National Environment Police Act, and Humane Slaughter Act; (2) state statues (anti-cruelty, wills and trusts, hunting, racing and fighting statues); (3) local animal control regulations; and (4) extensive common law (standing, rights, free exercise of religion, property, landlord-tenant disputes, torts, marital dissolution and custody, and bailment).

700 Trial Advocacy I (2). A practical skills course in advocacy which introduces students to the fundamental components of a typical civil and criminal trial and requires students to perform exercises involving each component and try a mock civil or criminal case from provided problem materials. The course is graded on a pass/fail basis. Prerequisite or corequisite: Evidence.

702 Conflict of Laws (2-3). Domicile; jurisdiction and limitations on the exercise of jurisdiction; judgments; full faith and credit; choice of law; conflicts problems in federal and international settings; conflicts problems in selected areas. Prerequisite: Civil Procedure.

703 Trial Advocacy II (2). A practical skills course in the art of trial advocacy with an emphasis on technique, style, and methods of persuasion. During class sessions, students perform exercises involving the various stages of a law suit, and are critiqued on their performances. Following performance of the exercises, students are divided into teams and try a mock case in a trial competition, from which the Law School's National Trial Competition Teams are selected. The trials are evaluated by trial lawyers and federal or state judges. The course is graded on a pass/fail basis. A student may not enroll in this course and Trial Practice. Limited enrollment. Prerequisite: Trial Advocacy I

705 Trial Advocacy III (2). Students, under the supervision of trial advocacy faculty, participate in trial competitions. Enrollment by invitation only. The course is graded on a pass/fail basis. Prerequisite: Trial Advocacy I and II.

706 Complex Litigation (2-3). As related to litigation of complex cases, study of special issues of party joinder and intervention, class action requirements and limitations, discovery, case management, and estoppel by verdict or judgment. Prerequisites: Civil Procedure I and II.

707A Advanced Legal Writing: Practical Skills Development (2-3). Preparation of students for writing problems commonly encountered in the first two years of law practice: jury instructions, general correspondence, opinion letters, simple contracts, litigation motions and pleadings including a complaint, answer and some discovery documents. Individual feedback provided. Prerequisites: None.

707C Advanced Legal Writing: Litigation Drafting (2-3). Preparation of litigation documents and pleadings, including complaint or petition; cross-claim, counterclaim or third-party petition; answer; discovery documents such as a set of interrogatories or requests to admit; dispositive motions; and settlement agreements. Prerequisites: Civil Procedure I & II.

709 Sales and Leasing (3). A survey of the law governing the sale and leasing of goods; Articles 2 and 2A of the Uniform Commercial Code and other relevant statutes, as well as international conventions; concepts introduced into contract law by the UCC; economic and social models used to analyze the function and application of the statutes. This class will satisfy the UCC requirement.

710 Advanced Lawyering Processes (1-3). Legal analysis, research and writing; instruction and discussion of the research and writing process and related topics in legal method and legal education; supervised production of an expository writing, advocacy writing and scholarly writing; development of research and writing exercises for use in the first-year Legal Writing Program and service as Teaching Assistants in the Program; limited enrollment; admission by application to the instructor.

711 Remedies (2-3). Remedies for violation of legally protected interests; history and development of equity jurisdiction and modern equity practice; injunctions; declaratory judgments; rescission; reformation; restitution; contempt; damages. Prerequisite: Civil Procedure.

712 Problems and Issues in the Death Penalty (2). Issues and problems in the administration of the death penalty; the Missouri capital sentencing scheme; constitutional limitations, statutory schemes, state review systems, procedural matters and collateral review of death sentences.

713 Death Penalty Clinic (1-2). The post-conviction process of collateral review in death penalty cases; training in legal representation of the post-conviction petitioner. Pre-or Co-requisite: Problems and Issues in the Death Penalty.

714 Gender and Justice (2-3). Students will examine and discuss legal issues of special importance to women. Topics will include (among others) sexual discrimination, sexual harassment, domestic violence, reproductive autonomy, and pornography. The course seeks to present each topic in its social context by supplementing legal readings with materials drawn from the social sciences, literature, and film. Paper required. Enrollment limited to fifteen students. Recommended: Constitutional Law I.

715S Cities & The Environment (2). This seminar course examines a range of environmental issues that are especially important to cities and urban populations. Topics will include sprawl, environmental justice, the redevelopment of contamnated land, and air pollution, among others. In order to convey the real-world complexity and excitement of these issues, the course will include in-depth case studies, student exercises, and occasional guest speakers.

716 Computers and the Law (2-3). Survey of the areas of the law with existing or potential application to computers (such as contract law, intellectual property law, criminal law, tort law and constitutional law) highlighting the legal issues involved in the areas studied.

718 Seminar in Law, Science and Social Science (2-3). Jurisprudential issues at the intersection of law, the sciences, and the social sciences; the structure of science and scientific theories; comparison of legal and scientific theories, and how scientific theories have moved into the social sciences and on into law; particular applications of scientific principles to legal theory, such as jury selection decision making processes within juries, eyewitness testimony, child witnesses, the insanity defense, the juvenile justice system, and capital punishment.

720 Secured Transactions (3). Secured Transactions in personal property under Article 9 of the Uniform Commercial Code, function and form of a security agreement, process of perfecting a security interest, priority among unsecured parties; secured sales of goods under Article 2 of the Uniform Commercial Code.

721 Commercial Transactions (3). Law of negotiable instruments; bank collections; Articles 3 and 4 of the Uniform Commercial Code; electronic funds transfers.

725 Water Law (2-3). Private acquisition of water rights through riparian ownership and prior appropriation; public rights to water existent in bed ownership easements and trusts; ground water management; water distribution organizations; federal allocation and control of water resources; interstate allocation.

728 Law and the American Indian (2-3). An anthropological, historical and legal study of the American Indian, including a focus on American Indian traditional law and values, federal policy and current legal issues.

729 Preservation Law (2-3). An exploration of the legal and economic issues impacting preservation of land, wilderness, buildings and archeological and historical sites, including a study of various federal and state preservation legislation, and private land use preservation measures.

730 American Legal History (2-3). The development of American law from the colonial period to the present, including the formation of the Constitution and its subsequent interpretations, the evolution of common law categories, and the development of the legal profession and legal education, as well as the movements in American legal theory. Paper required.

731 Professional Responsibility (2). Code of Professional Responsibility and the Model Rules of Conduct; role of the lawyer as a professional; confidentiality; conflict of interest; zeal within the bounds of the law; competency; providing legal services.

732 Alternative Dispute Resolution (2-3). An overview of the emerging trend towards alternative forms of dispute resolution and some reasons for it, methods of dispute settlement, such as negotiation, mediation, arbitration and adjudication, the roles lawyers play in these various modes, problems and possibilities of non-adversarial methods of resolving conflict, particularly mediation.

733 Children in the Law (2-3). The ways in which the legal system treats children differently from adults and the justifications for such treatment, who should make decisions for the child, decisional authority that should be granted

to parents, children and the state in various contexts (e.g., abuse and neglect, health care for the child, foster care, adoption and education).

733R Juvenile Offenders & The Law (2-3). An examination of our justice systems's historical treatment of juvenile delinquent and status offenders, and how the goals and objectives of the past have evolved into today's juvenile offender laws; the rights of juvenile offenders in contrast to those of adult criminals; pre-trial and trial procedural issues under the juvenile code; certification of the juvenile offenders as an adult; dispositional/treatment alternatives for juvenile offenders; schools and the juvenile offender.

734 Mediation (2). The process in which a neutral third party assists others in resolving a dispute or planning a transaction; introduction to the nature of the process, its possibilities and limitations, its current and future uses, and how lawyers can and should be involved in it; public policy and political issues surrounding the mediation movement; professional responsibility and malpractice.

735 Seminar in Famous Trials (2-3). Historical and jurisprudential issues involved in a number of "political trials."

735R Law of the European Union (Part I) (1). An in-depth study of the legal and political framework and institutions of the European Union; the Commission, Council of Ministers, Court of Justice, Court of Auditors, and the European Parliament. Course will examine the interlocking web of European treaties, the expansion of the European Union, the European Union as a trade block and Ireland as a gateway to the European Union for non-bloc nations.

736 Debtor-Creditor Rights (2-3). Creditors' remedies and debtors' rights; provisional remedies; secured transactions (Article 9 of the Uniform Commercial Code); liens and exemptions; overview of bankruptcy law.

736R Doing Business In The Republic Of Ireland (1). A Survey of the Ireland Company law (Republic of Ireland) and the regulation of offshore investments. The course will focus on European Union and United States Perspective of the applicable competition laws, the legal framework of investment incentives in the Republic and both Irish and United States corporate taxation of multinational companies operating in the Republic of Ireland.

737R Law of the European Union (Part II) (2). An examination of the substantive and procedural law governing the member states of the European Community including such topics as the nature and application of European Union Law, the relationship between European Union and national laws, remedies in national courts, enforcement actions, damages and money claims, free movement of goods and workers competition laws, intellectual property, equal treatment of women and men, and non-discrimination.

738 Immigration Law and Process (2-3). Admission, exclusion, deportation, and naturalization of aliens; structure and powers of relevant federal agencies; categories of immigrant and non-immigrant visas and visa application procedures; asylum, extradition, and refugee status; rights of aliens; public policy issues and proposals for reform; practical problems in immigration.

738R Chinese Law (4.5). A summer abroad program in Chinese law taught at the University of Peking, Peoples Republic of China by Chinese Professors. Subjects include such topics as: Cultural History and Political Systems of China, Organization of the Chinese Legal System, Chinese Contract Law, Civil Law, Trial Practice & Rules of Evidence, Criminal Law & Procedure, Family Law, Human Rights Issues, Business Organizations, Taxation, Intellectual Property Law, Banking and Finance, Real Estate Law, Investment Law & Practice in China, and Alternative Dispute Resolution.

740S Appellate Process (2-3). This course will provide an in-depth study of the appellate court system—an advanced civil procedure course focused on the appellate process. It will cover important topics not typically covered elsewhere, including the structure of appellate courts, preservation of error, standing to appeal, the final judgment rule and its exceptions, standards of review, rules and mechanics for initiating appeals, alternative dispute resolution at the appellate level, preparing the record for appeal, brief writing, oral argument, rehearing en banc, certiorari, selection of appellate judges, opinion writing, and judicial canons of ethics. While there will be significant focus on techniques for effective brief writing and oral argument, the course will focus primarily on legal rules and concepts, not on skills. The principal emphasis will be on federal courts, but significant attention will also be paid to state appellate courts, particularly those whose rules and practices differ markedly from those in federal court.

743 Comparative Law (2-3). Historical and analytical study of the substantive and procedural nature of foreign systems, focusing on a comparison of the civil and common law traditions. Offered: Winter 2001

744 Jurisprudence (2-3). Nature of law; principal schools of juristic thought; fundamental concepts in development of legal system; relation of law and society. Paper required.

745 Law Review (1-3). Editorial work in connection with the "UMKC Law Review." Open to students selected on basis of scholarship. Ungraded.

745R Law Review Board (1-5). The members of the Law Review Editorial Board edit articles and student notes and comments for publication in the University of Missouri Kansas City Law Review; and shepherd the articles and student pieces through the production process.

746 Research & Writing Requirement (2). Completion of a paper of publishable quality, demonstrating intensive research and analysis under faculty supervision.

746I Internship (0).

746R Independent Study (0.5-3). Independent study, including research and writing projects, under faculty supervision.

747 Appellate Advocacy II (1). Preparation of memorandum (points relied on and summary of argument); presentation of two arguments before practicing attorneys. Ungraded.

748 Appellate Advocacy III (2). Ellison Moot Court Competition; preparation of an appellate brief and presentation of two oral arguments before federal and state judges. Open to the 16 finalists from Appellate Advocacy II. Ungraded.

750 Urban Lawyer (1). Staff members of the Urban Lawyer receive credit for writing case notes, annotations, and statutory developments, for editing articles, for editing comments and book reviews, and for participation in urban legal conferences. Research Editors of the Urban Lawyer receive additional credit for writing a major article or comment for publication in the journal. Ungraded.

750B Urban Lawyer Board (1-5). Members of the Urban lawyer Editorial Board, articles that are submitted and coordinates student written case digests and comments for publication in The Urban lawyer. The members of the board ensure the articles and student pieces conform to publication standards and work the articles through the production process. Board members must take at least one credit in the fall semester and can carry over the remaining allocated credits to the winter semester. Ungraded.

750R Seminar On The Urban Environment (2). A study of the interaction of urban density and the built and natural environment to show how problems within metropolitan areas become more complex and difficult to solve because of the multiplicity and fragmentation of government, and the proximity of systems and people; including a review of pertinent state and federal environmental legislation and administrative decision-making. Explored areas include: urban infill in brown field areas; air and water quality, transportation congestion, historic and open space preservation; municipal waste and recycling; regulation of noise and aesthetic nuisance; building material toxicity; flooding; airport and high way noise; infrastructure deficiencies and environmental racism.

751 Family Law (2-3). Pre-marital contracts; marriage; annulment; paternity; parent and child; divorce; alimony; division of property; separation agreements; adoption.

751S Family Violence (2-3). An in-depth examination of family violence from a legal perspective. Course topics will include interdisciplinary study of the dynamics and psychology of family violence, of historical and social policies, specialized problems of family violence (including intimated partner violence, child abuse and neglect, gay and lesbian battering, and elder abuse) and legal responses. Students will receive practical training in safety planning, intake, review of community resources, case logistics, and advocacy for temporary orders.

752R Family Law Practice (2). A practical skills course in family law in which students participate in all phases of family law practice, including the initial client interview; the drafting of questionnaires, pleadings, motions custody and discovery plans, support and maintenance proposals, orders and other documents; negotiation, and preparation for litigation. Students work in teams and perform exercises which simulate "real world" situations. Prerequisite: Family Law.

752S Child & Family Services Clinic (2-3). Students represent the Missouri Department of Family Services in representing children in foster care or otherwise under the authority of the Department. Students work under the supervision and direction of clinic faculty and faculty directors, receiving classroom instruction in the substantive law and procedure governing juvenile court actions. Students must be Rule 13 eligible. Pass/Fail. Offered: Fall Semester 2001.

753 International Law (2-3). Survey of international legal studies; nature and role of international law, its effectiveness in dealing with international problems and its application in domestic jurisdictions.

754 International Business Transactions (2-3). Legal problems encountered in international business; jurisdiction and choice of law; enforcement of judgments; methods of protecting foreign investments; extra-territorial application of United States regulations, e.g. anti-trust law.

757 Business Planning (2-3). Problem-method study of choice of entity and various other legal issues and planning challenges in forming a closely held business entity and in private and public financing of an existing enterprise. The course includes practical training from drafting organizational documents

to conducting simulated client interviews and providing written advice concerning hypothetical transaction. Limited enrollment.

757R Entrepreneurial Law & Practice Clinic (2-3). Under faculty supervision, students will counsel start-up companies and their owners and implement business planning advice by drafting articles of incorporation and organization, by-laws, partnership agreements and other business contracts. Other business-related matters ranging from regulatory, consumer, licensing, and taxation requirements; copyrights, trademark, and patent creation; and 501(C)(3) applications for non-profits may also be covered in this course. Clinic students will also receive classroom instruction in the areas of client counseling and business planning and drafting of business documents. Prerequisites: Business Organizations, Commercial Transactions, Professional Responsibility (or concurrent enrollment). Missouri Supreme Court Rule 13 certification required for in-court representation.

758S Securities Regulation (2-3). Problem and policy method study of the Securities Act of 1933 and selected aspects of the Securities Exchange Act of 1934; financing of an enterprise; reorganizations; tender offers; proxy regulation; and securities fraud claims.

760 Insurance (2). Life, fire, accident, and liability insurance; nature of insurance; nature of insurance contract; special rules of construction; standard policy provisions; regulation of insurance industry.

761R Mental Health Law (2-3). Students work with the general counsel's office of the State Department of Mental Health and Department of Psychiatry at the UMKC School of Medicine. Students work on civil commitments, implementing and drafting department regulations, researching and writing memos on problems that arise during their internship, and generally learning about the scope of work of counsel at a large public agency. Time will be divided between being on site in the Western Missouri Mental Health Center and working in the virtual office on short-term urgent research memos.

763 Labor Law (2-3). Regulation of labor relations pursuant to the national Labor Relations Act, focusing on the establishment of collective bargaining relationships, unfair labor practices, collective bargaining, strikes, picketing and pre-emption.

764 Administrative Law (1-3). Introduction to the administrative process; role, function, and processes of administrative agencies; policy issues of administrative government; judicial review.

765 Federal Jurisdiction (2-3). Federal court system and jurisdiction of the federal courts; diversity of citizenship; removal of cases from state to federal courts; conflicts between state and federal judicial systems; original and appellate jurisdiction of the Supreme Court. Prerequisite: Civil Procedure.

766 Land Use Planning (2-3). Legal and administrative aspects of land use and the problems and techniques of urban planning; statutory anti-nuisance devices; controlling land use by private methods (restrictive covenants, easements, and servitudes); zoning; subdivision controls; public acquisition of land; building and housing; urban renewal and redevelopment; environmental quality control (air, water, and conservation); relationship of lawyers, planners, private builders, and owners to governmental policies.

768 National Labor Relations Board Clinic (3). One-semester clinic in which student(s) will be assigned to the Kansas City Office of the National Labor Relations Board. Under the direction and supervision of the Regional Director, the student(s) will participate in the investigation and prosecution of unfair labor practice charges filed by employers, unions and employees. The student(s) may participate in conducting elections to determine whether employees shall be represented by a union. The student(s) will also assist in Federal District Court litigation to obtain injunctions against NLRA violations. Tasks will include document review, witness interviewing, research and case preparation. Bi-weekly conferences with faculty supervisor and log of clinic activities also required. Prerequisite: Labor Law.

768R Department of Labor Clinic (2-3). Students work with the solicitor's Office of the United States Department of Labor assisting attorneys enforcing federal labor statues, including the Fair Labor Standards Act, OSHA, ERISA, and the Davis-Bacon Act. Under the supervision of the Deputy Regional Solicitor, students perform legal research relating to enforcement actions, draft discovery requests review documents, participate in client and staff conferences, and assist in the investigation of violations. Clinic participants maintain a log of their activities and have bi-weekly conferences with the faculty supervisor to review and evaluate their clinic experiences and research work product.

770 State and Local Government Law (2-3). Structure, powers, and divisions of local governments in metropolitan areas; role and powers of cities, counties, towns, school and special districts; decentralized and neighborhood governmental units and other local governmental units; legislative, home-rule, and constitutional sources of power; sovereign immunity; boundary adjustments; public employee relations; citizen participation; reapportionment; licensing and permits; ethics and public access to records; regional governance; intergovernmental cooperation; inter- state compacts and authorities; function of local government with reference to solution of problems created by urban growth; role of judicial, administrative, and political processes.

773 Environmental Law (2-3). This course covers law developed to control pollution and to protect our country's physical environment. The course provides introductions to ecological theories and to early common law efforts to protect the environment. But the course mainly focuses on current environmental statues (for instance, the Superfund Act, the Resourse Conservation and Recovery Act, the Clean Air Act, and the Clean Water Act) and on current federal constitutional issues involving the environment. (Priorities in this mix may vary from year to year, depending on current events and related course offerings). Enforcement policies, citizen activism the needs of private industry, and the administrative process are also considered. No prerequisites.

773I International Environmental Law (2-3). This course analyzes law applicable to environmental and natural resource issues affecting more than one country. The course will examine the sources and principles of international environmental law, sustainable development, the emerging trent toward market-based approaches to environmental protection, scientific and technological issues, and the range of substantive and institutional responses to such issues as climate chage, biodiversity, and conservation. The course includes an introduction to "environment and international trade" issues. No prerequisites, but Environmental Law or international Law is helpful.

773R Environmental Law Clinic (2-3). Student(s) perform clinic activities at the United States Army Environmental Office, including performing legal research, writing position papers, attending state and federal regulatory hearings, participating in planning conferences and assisting with litigation. Students are supervised by the Central Regional Environmental Chief Coordinating Attorney and attend regular conferences with a faculty supervisor who reviews copies of all clinic written work that may be so reviewed under the United States Army Environmental Office rules. Prerequisites; Environmental Law or Administrative Law. Ungraded. Pass/Fail.

775 Appellate Advocacy IV (1). Participation on National Moot Court competition team. Ungraded.

778 Workshop on Current Issues in Family Law (2). Under direction of professor, students provide editorial assistance in publishing Journal of the American Academy of Matrimonial Lawyers, write a paper on selected topics and prepare summaries and bibliography of current works. Limited enrollment. Prerequisite: Family Law.

781 Law and Literature (2-3). Examination and criticism of selected law-related novels, dramas and short stories within their legal and social context; exposure to legal history, comparative law, and law and anthropology.

782 Environmental Law Seminar (2-3). This course provides the theoretically inclined student the opportunity to address broad issues of public policy and resourse allocation in more depth than the basic environmental survey course allows. The seminar will also invole case studies and class problems to give the course real-world context. The seminar will typically focus on one particular ecological issue, such as environmental justice, sustainable development, or ecology as jurisprudence. No Prerequisites, but Environmental Law is helpful. Fulfills the "J" requirement.

782R US Environment Protection Agency Law Clinic Nat. Agr Cmpl Ast Ctr (2-3). students will be assigned to work with EPA's National Agriculture Compliance Assistance Center (AG Center). Under the supervision of an attorney with the Ag Center, a student will be expected to perform legal research, write memoranda, develop compliance assistance materials, respond to inquiries from the regulated community, and participate as appropriate in meetings, conferences, and training sessions with EPA, other federal agencies, trade associations, etc., and, in general, assist in the activities of the Ag Center. Students who have completed Environmental Law or administrative Law. Eligible interested students will then be screened and selected. Ungraded. Pass/Fail.

782S U.S. Environmental Protection Agency Clinic, Region VII (2-3). Students will be assigned to work at the EPS's Region VII Headquarters in Kansas City, Ks. Under the supervision of an EPA attorney, students will be expected to perform legal research, write memoranda, develop compliance assistance materials, respond to inquiries from the regulated community, and participate as appropriate in meetings, conferences, and training sessions with the EPA. Students will attend regular conferences with their Supervising Attorney and Faculty Supervisor, and will produce a final written project based on their experience. Students mush have completed two semesters of law school. Preference will be given to students who have completed an environmental course at the Law School. Eligible students will be screened and selected. Positions limited. Ungraded, pass/fail.

783 Natural Resources Law (2-3). Exploitation and conservation of natural resources; management of federal lands; water law; energy law; federal wildlife preservation; resolution of disputes involving use of natural resources.

790 Legal Aid Clinic (3). A two-semester clinic offered through the offices of Legal Aid of Western Missouri. Classroom instruction from faculty and Legal Aid attorneys in one or more areas of poverty law and in civil advocacy skills, including counseling, discovery, case preparation, and trial techniques.

Students utilize their skills and knowledge in the five Legal Aid poverty law divisions. Faculty and Legal Aid attorney supervision. Limited enrollment. Concurrent enrollment in certain courses may be required for some field placements. Ungraded. Pass/Fail.

791 Civil Rights (2-3). Elements of a Section 1983 case, enforceable rights and available defenses; procedural aspects of civil rights cases; suits against federal and state governments. Prerequisites: Constitutional Law I.

792S Seminar On Gun Law & Policy (2-3). This course examines legal and public policy issues relating to firearms and the role they play in the United States, with a particular emphasis on debates about the meaning of the Second Amendment and attempts to hold gun manufacturers and sellers liable under tort law. Research paper required. No prerequisite courses.

796 Economics and the Law (2-3). Tools of economic analysis which have particular application in the law; equity and efficiency are weighed in regulation, pollution, discrimination, monopoly, financial markets, human resources and government expenditure and taxation policy. Principles will be introduced and expanded upon using both lecture and case study techniques.

798 Copyright Law (3). Protection extended to works of authorship including literacy works, computer programs, works of applied art, sound recordings, photographs, etc. under U.S. copyright law. How protection for works is achieved, the nature of rights protected, transfer of rights, and infringement actions. Related common law rights that may exist under doctrines such as implied contract, unfair competition, right of privacy, and right of publicity. (Consent of the instructor is required for students who have taken Copyright, Patent, and Trademark Law).

800 Legal Research Thesis (1-8). Research for LL.M. thesis.

807 Problems in Bankruptcy (2). Selected problems in bankruptcy with emphasis on procedure. Topics may include Chapter 11 reorganizations, consumer bankruptcy issues, wage-earner plans.

808 Intellectual Property Law (2-3). Substantive and procedural law of intellectual property. Coverage includes copyrights and patents and other areas at the option of the instructor.

808R Law of Information Technology (1). The course will examine some legal issues that the use of Information Technology has created. The course will focus upon United Kingdom and Irish substantive law, informed by legislative developments prompted by European Union legislative initiatives. These measures and approaches will be contrasted with United States law and legislative proposals. No specific expertise in the use of computers is required of the students.

813 Employment Discrimination Law (2). Substantive and procedural aspects of Equal Employment Opportunity Act and related matters.

814R Employment Law (2-3). Survey of legal doctrines regulating the employment relationship, including the regulation of wages, hours and benefits; privacy in the workplace; workers' compensation; suits for unjust dismissal; drug and polygraph testing; and sexual harassment. May be offered as a seminar.

815 Products Liability (2-3). Theory and practice in products liability cases; negligence; misrepresentation; strict liability; theories of product defect; applicability of the Uniform Commercial Code including warranties and disclaimers; actions among members of the distribution chain.

815R Disabilities and the Law (2-3). An interdisciplinary study of the law relating to disabled persons in the areas of employment, education, and access to transportation, health, welfare and social services to provide an understanding of how the law affects individuals with disabilities and public and private entities. Legislation considered include the American with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, the individuals with Disabilities Education Act, the Family and Medical leave Act, the Fair Housing Act, the Voting Accessibility for the Elderly and Handicapped Act, and the Title VII of the Civil Rights Act of 1964. The enrollment of graduate students from other disciplines, such as education, business, and health sciences is encouraged to allow for interdisciplinary discussion of the topics involved.

815S Leadership In Disability Studies: A Multidisciplinary

Approach (3-4). An overview of the history of disability issues, some individualized perspectives of persons with disabilities, the rationale for interdisciplinary approaches regarding disability studies, and opportunities for leadership development with regard to disability issues. The students will participate in a forum that encourages reflection, exchange of ideas, interaction with persons with disabilities and persons from various fields of study, and case analysis. After an orientation to the study of disabilities, various aspects of community membership for persons with disabilities will be addressed, particularly with regard to the workplace, the neighborhood, and the home. Emphasis with placed on vital leadership roles that facilitate community membership and contribution of persons with disabilities to society.

820 Criminal Trial Techniques (2). Strategy and tactics in handling a criminal case; effective representation of the accused at various stages of the

criminal process; securing pre-trial release; plea bargaining; motion practice; discovery; voir dire; opening and closing statements; examination of witnesses; use of the expert; sentencing; appeal; collateral attack.

822 Post Conviction Remedies (2). Federal and state remedies for collateral attacks on criminal convictions; vacation of sentences and convictions; federal habeas corpus and similar devices. Paper required when course is offered as a seminar. Prerequisite: Criminal Procedure I.

825 Law and Mental Illness (2-3). Principles of psychiatry, psychology, and neurology as related to the administration of criminal justice; the effect of mental illness at various stages in the criminal process; the use and cross-examination of expert witnesses; how to recognize and establish the fact of mental illness; sexual psychopaths; commitment, treatment, and release of persons acquitted on the ground of insanity. Limited enrollment.

826 Seminar in Constitutional Interpretation (2-3). Current issues in constitutional law. Paper required. Prerequisites: Constitutional Law I.

830S Human Rights Enforcement (2-3). This course will examine the adequacy of international mechanisms for the protection of human rights and explore how, if at all, these mechanisms can be strengthened and improved to better prevent and respond to the most egregious human rights violations. Students will consider various mechanisms for human rights enforcement including UN mechanisms, multilateral action, humanitarian intervention and peacekeeping, sanctions, information intervention, industry standards, and the internationalization of domestic legal systems. Paper required.

831R International Human Rights law (1-3). Study of the law protecting individuals and groups against govermental violations of internationally guaranteed rights; historical antecedents and theoretical underpinnings; human rights in national law (the United States); post World War II developments; principal international human rights instruments; regional human rights arrangements; human rights of women, refugees, ethnic minorities; implementation of rights; international obligations of the United States; selected civil, political, ecomomic and social rights.

832 Law of International Trade and Finance (3). Study of the World Trading System, focusing on policy and application, including the WTO, the NAFTA, U.S. trade remedies, foreign direct investments controls, and export controls.

834 Tax Procedure (2). Problem-method study of procedures and taxpayers' rights when deficiencies are assessed by the Internal Revenue Service; tax liens; commencement of litigation in Tax Court, Federal District Court, and Court of Claims.

834R Tax Clinic (1-3). Students counsel clients in federal, state and local tax controversy matters in the Kansas City Tax clinic, under the supervision and direction of tax faculty, clinic director, and volunteer attorneys. Classroom instruction in the area of tax controversy procedure and client counseling. Prerequisite: Federal Income Tax and Tax procedure (or concurrent enrollment). Method of grading: Pass/Fail.

837 Negotiating Mergers and Acquisitions (2-3). Problem-method study of corporate, tax, securities, and business problems entailed in buying and selling a corporation; fundamental corporate changes: recapitalizations, mergers, sale of assets, sale of stock, and tender offers; corporate finance and rehabilitation of financially distressed corporations.

838 Tax Accounting (1-3). Problem-method study of the accounting aspects of federal income taxation; cash, accrual, and installment methods of reporting; inventory methods; depreciation and cost recovery concepts; transactional accounting concepts; net operating losses.

838R Tax Practicum I (1-3). Practical skills training in the sources and methods of tax research (including electronic database sources) using problem method approaches; analytical and planning skills are developed through in-depth case study research.

840R Seminar in Sex Offenders, Law and Public Policy (2-3). An interdisciplinary study of what we know and don't know about sex offenders and their crimes, including an evaluation of current legal strategies used in an attempt to safeguard the community from sex offenders.

843 Federal Income Taxation of Estates and Trusts (2). Income tax problems of the fiduciary; grantor's trusts; income, estate, and gift tax problems relating to optional or discretionary acts of the fiduciary in retention and/or distribution of income or corpus.

845 Deferred Compensation (2-3). Problem-method study of deferred compensation arrangements; qualified pension and profit sharing plans; individual retirement accounts; qualified stock option plans; other methods of deferred compensation.

846 Professional Malpractice Litigation (2-3). Negligence by those in professions; consideration of the practice components of litigating legal malpractice claims, including investigation, jurisdiction, legal theory and defenses, pleading, discovery, trial, expert testimony, jury instructions and judgment. Prerequisite or co-requisite: Professional Responsibility (Law 721). Cross reference with Law 731.

848R State and Local Taxation (2-3). State and local taxation of income, sales and property, including the apportionment of tax obligations to multiple states. Restrictions imposed by constitutional doctrines such as the uniformity and equality requirement and the prohibition on interfering with interstate commerce.

852RR Justice & The Law Seminar (2-3). The seminar will focus on Justice and law with background readings and discussion involving topics such as: Law, Morality and Justice; Autonomy and Justice: The Economy and Justice; Gender and Justice; Race and Justice; Criminal Justice; and International Justice.

853 Scientific Evidence & Opinion Testimony (2-3). Preparation of civil and criminal cases involving experts for litigation with emphasis on the use and admissibility of demonstrative evidence and expert opinion testimony, including the direct and cross-examination of expert witnesses; study of some specific disciplines in the physical sciences which provide the expertise/context for scientific evidence, including, the physical sciences (document examiners, crime laboratory examiners), biological and life sciences (pathology, biology, DNA, toxicology), behavioral sciences (psychiatry, psychology, social sciences, detection of deception), applied sciences (driving while intoxicated, speeding).

858 Consumer Protection (2-3). Protection of consumers from false advertising, unfair sales practices, and consumer credit and debt collection abuse. Topics which may be covered are Truth-in-Lending Act, Uniform Consumer Credit Code, Fair Debt Collection Practices Act; Interstate Land Sales Disclosure Act, Federal Trade Commission and Missouri Attorney General activity, Missouri consumer credit legislation, consumer warranties, consumer class actions, abusive collection practices.

860 Communications Law (2-3). The First Amendment as it relates to the mass media; media access to sources of information; conflict between the right of a defendant to a fair trial and the rights of the media; governmental restraints on the publication of information; individual's right to recover for publication of false information or embarrassing facts; differential treatment of broadcast and print media; First Amendment limitations on the FCC's regulation of broadcasting in such areas as licensing, discussion of controversial issues, and advertising.

861 Real Estate Finance (3-4). Real estate investment and development; basic financing instruments (e.g., mortgages, deeds of trusts, contracts for deed); foreclosure remedies; home finance, national housing market; financing of commercial and industrial properties; construction financing; mechanic's liens; priority disputes; bankruptcy issues affecting real estate security interests.

862 Seminar in Urbanization (2). Legal effects of urbanization and measures for dealing with this phenomenon; analysis of advanced planning and development controls (control growth, official map, master planning, planned unit development, averaged density and cluster zoning, floating and non-Euclidean zones); revitalization and re-development of central cities, tax abatement, tax increment financing, federal programs and public-private partnerships; financing of capital needs of metropolitan areas through special districts, benefit assessments, impact fees, and bonding.

868 Trusts: Planning, Drafting, Administering & Litigating (2-3). Focus on advanced planning and drafting of inter vivos private express trusts for individuals, including proper use of readily available forms (tax-related drafting limited to marital and charitable deduction forms), consideration of trustee's duties, powers and liabilities pursuant to the Missouri Trust Code and related cases, and special emphasis on the recently-adopted Uniform Investor Act and the significant changes it has introduced to Missouri trust investment law. Estates & Trusts is a prerequisite to this course, and concurrent enrollment in Estate Planning & Drafting is advised.

868R Valuation For Transfer Tax Purposes (2-3). An in-depth examination of the methodologies and approaches to fair market valuation of tangible and intangible personal property, real property, and business interest for federal transfer tax purposes. This course also will examine the provisions of chapter 14, sections 203A and 2057 of the Internal Revenue Code, and their impact on determination of fair market value for federal tax purposes. Valuation issues encountered when transferring interest in C corporations, S corporations, partnerships and trusts will be explored. Finally, discounting valuation techniques employed in the formation of GRATS, QPTRS, and FLPS will be examined.

870R Education Law: Government & Legal Aspects of Education (2-3). This course is designed to give students an introduction to the major legal doctrines that affect K-12 schools, as well as the policies that underlie or are changing those doctrines. Students should gain a working understanding of the impact of federal and state law on the operation of schools, the rights and responsibilities of teachers and administrators, and the rights of the students who attend those schools.

874 Tax-Exempt Organizations (2). An in-depth examination of the state and federal laws that govern the formation and operation of tax-exempt organizations, with emphasis on Sec. 501 (c) (3) charities; criteria for

tax-exempt status; IRS application and reporting procedures; unrealted business income tax issues.

875 Real Estate Transactions (2-3). Practice-oriented course, including the development of drafting skills, in which questions involving basic residential and commercial real estate sales and civil and leasing transactions are considered, such as title, title insurance, contract conditions, contract remedies, commercial leasing (office and shopping center issues) and issues concerning and confronting brokers; special emphasis on Missouri and Kansas law.

875I International Aspects of Real Estate Transactions (2-3). This course is designed to introduce students to the special nature of real estate transactions involving U.S. private investment in overseas real estate projects and overseas investment in the U.S., including transactions involving major real estate clients looking to overseas expansion, especially in the hospitality industry (hotels, restaurants, and the like), transactions involving U.S. investors desiring to obtain factories and realted office and administrative facilities abroad, and transactions involving U. S. energy, mining and agricultural companies looking to expand their operations internationally. Additionally, the course will consider the methods that international investment may find its way into domestic practices, a consequence of the GAAT agreement's impact on international commerce.

877 Bankruptcy Court Clerkship (2). Students serve in a clerkship with a Bankruptcy judge. Limited enrollment and open only to students enrolled in Law 807, Problems in Bankruptcy. Students work at least 70 hours at the court, attend tri-weekly conferences with the Problems in Bankruptcy professor, and attend review conferences with the bankruptcy judge.

881 Seminar on the Supreme Court (3). Students simulate the work of the Supreme Court on nine cases presently pending before that court. The student justices study the briefs and related material filed in each case, discuss and vote on the cases, and write majority and dissenting opinions. Enrollment in the seminar is limited– fittingly–to nine justices.

882 Patent Law Seminar (2-3). Patent Law Seminar: A two-hour course for study of advanced patent law topics of current interest. The classes will analyze now-controlling Federal Circuit law on issues such as patentable subject matter, double patenting, post-issuance PTO procedures (reissue, re-exam), and infringement/validity of means-plus-function claims.

884 White Collar Crime (2). Examines substantive federal law in the areas of fraud, public corruption, financial crimes and conspiracy; it also includes examination of procedural and policy issues related to business and white-collar investigations. Prerequisites: Criminal Law and Criminal Procedure I.

885 Seminar in Philosophy and Law (2). An examination from a philosophical perspective of the historical and conceptual relationships present in the evolution, development and analysis of law, including natural law theory, legal positivism and legal realism, and focusing on a specific area of controversy in the law.

886 Corporate Taxation I (3). Tax treatment of corporations and shareholders with respect to formation, non-liquidating distributions, stock dividends, redemptions and liquidations. The course will also cover the personal holding company tax, the accumulated earnings tax, collapsible corporations, multiple corporations and an overview of S corporations.

887 Corporate Tax II (3). Tax consequences of corporate reorganizations; survival of tax attributes; acquisition of loss corporations; and a survey of consolidated return reporting. Prerequisite: Corporate Taxation or Instructor's permission.

888R Partnership Taxation (2-3). An in depth examination of the tax principles governing partnerships limited liability companies and other unincorporated organizations classified as partnerships for tax purposed, including questions involving the tax consequences of the formation of such organizations, operating distributions, basis computations, liquidating distributions, and sales of ownership interests.

889 International Taxation (2-3). An introduction to the taxation of income of U.S. citizens, residents and corporations from foreign sources and the income of foreign residents and non-residents from U.S. sources. Topics may include sources of income rules, foreign tax credit provisions, the earned income exclusion for foreign source income, income tax treaties and a survey of the tax treatment of U.S. investments made offshore.

890 Sports Law (2-3). An examination of amateur and professional sports law issues, focusing on regulation of interscholastic, intercollegiate, and Olympic sports. The course may include such topics as constitutional law, tort law, contract law, Title IX gender discrimination, federal disability discrimination laws, the legal characterization of college athletes, regulatory authority of the National Collegiate Athletic Association, antitrust law, international law affecting Olympic sports, trademark and unfair competition law, and regulation of private sports associations, intellectual property, sports broadcasting, and player agent representation issues.

890R Entertainment Law (2-3). An examination of the legal issues affection the print and broadcast media. Topics covered may include copyright, antitrust,

spectrum allocation, right of privacy, first amendment issues (prior restraint, obscenity, commercial speech, defamation and access to both information and judicial proceedings), licensing and new technologies including and beyond cable television.

891 Estate Planning For Closely-Held Businesses (1-3). Maximizing the lifetime estate and minimizing estate shrinkage at death. Inter vivos gifting and estate freeze techniques through use of corporations, limited partnerships and limited liability companies; disposition of family business interests through the use of private annuities, self-canceling installment notes and buy/sell agreements; post-mortem planning techniques for the preservation of the estate including general and special use valuation methods and the use of installment payment methods for death taxes under \$\$6161 and 6166 of the Code.

892R Taxation of Estates, Gifts and Trusts (2-3). Problem method study of estate, gift and generation skipping transfer taxes and the income taxation of estates and trusts. Emphasis on lifetime and post-mortem planning as well as compliance requirements.

893 International Taxation (3). An introduction to the taxation of income of U.S. citizens, residents and corporations from foreign sources and the income of foreign residents and non-residents from U.S. sources. Topics may include sources of income rules, foreign tax credit provisions, the earned income exclusion for foreign source income, income tax treaties and a survey of the tax treatment of U.S. investments made offshore.

895 The Jury: Practice and Perspectives (2). Examination of the American jury from both practical and theoretical perspectives; Constitutional issues relating to jury representativeness, use of peremptories, and alleged jury bias; jury selection techniques; juror information processing and the dynamics of jury deliberations; jury competence; jury size; juror misconduct; jury "nullification"; proposals for reform of the jury system.

895S Jury Selection (1). Students study the purpose of voir dire and the law pertaining to jury selection and receive hands-on experience in selecting a jury role-playing as lawyers; jurors, and presiding judge in a concluding 2 1/2 hour courtroom simulation (where a jury is selected after making challenges for cause and exercising preemptory strikes); and learn that jury selection is an art-not a science-which needs to be tailored to the facts of the case and the witnesses the attorney expects to present. An actual case involving a badly injured young plaintiff and a large corporate defendant-where liability is questionable-is used for the simulation. Students learn active listening skills and how to interpret non-verbal behavior. Examples form prominent, practicing lawyers are presented. The course is graded on a pass/fail basis.

897 Seminar in Legal Education (1-2). Pedagogical philosophy of legal education; common themes in first-year legal education; techniques of cooperative learning of legal materials. Students may act as study group leaders for various first-year course subjects. Ungraded.

898 Construction Law (2). The Construction Law course would emphasize state and federal construction law and would provide the students with practical experience in drafting contracts, negotiating disputes, and conducting a mock arbitration. The course would cover the contract responsibilities and remedies of contractors, subcontractors, design professionals, sureties and owners, including the United States Government. The course would emphasize the controlling state and federal statutes and regulations, as well as case law which illustrates the application of the statutes and other areas of law not covered by statute. The classroom sessions will include discussion of the practical aspects of legal practice in the construction industry, with instruction and examples regarding the drafting of documents and contracts, negotiation of disputes, and decision-making regarding the type of dispute resolution forum to recommend to a client.

899 Required Grad Enrollment (1).

School of Medicine

Hospital Hill campus 2411 Holmes Street (816) 235-**1808** Fax: (816) 235-**5277** medicine@umkc.edu http://www.umkc.edu/medicine

Mailing Address

University of Missouri-Kansas City School of Medicine 2411 Holmes Street Kansas City, MO 64108-2792

Dean:

Betty M. Drees, M.D. Provost for the Health Sciences, Emeritus: E. Grey Dimond, M.D.

Senior Associate Dean:

Paul Cuddy, Pharm.D. (Academic Affairs)

Associate Deans:

- Louise M. Arnold, Ph.D. (Research in Medical Education and Director, Office of Medical Education and Research)
- Paul Cuddy, Pharm.D. (Council on Curriculum)
- Wendell K. Clarkston, M.D. (Graduate Medical Education)
- Richard J. Derman, M.D. (Women's Health; Clinical Research - Interim)

Rob Hornstra, M.D. (Western Missouri Mental Health Center)

- Linda L. Johnson, M.D. (Office of Student Affairs)
- Mark S. McPhee, M.D. (Saint Luke's Hospital Programs) Lloyd C. Olson, M.D. (Children's Mercy Hospital Programs)
- Reaner G. Shannon, Ph.D. (Office of Cultural Enhancement & Diversity)
- Mark T. Steele, M.D. (Truman Medical Center)
- Open (Research Administration)

Chairs

Gary Salzman, M.D. (Council of Docents) Open - (Faculty Council)

Assistant Deans

Diana Dark, M.D. (Saint Luke's Hospital Progams)

Kim McNeley, Ph.D. (Student Affairs) Alan R. Salkind, M.D. (Council on Selection)

Bob I. Yang, Ph.D. (Council on Evaluation)

Rose Zwerenz, M.D. (Truman Medical Center Lakewood Programs)

History

The University of Missouri opened a medical school on the UMKC campus in 1971. Using an alternative approach to medical education from that of the traditional four-year school, the School of Medicine has as its primary mission the training of physicians able to meet the health-care needs of Missouri and the nation.

The approach used at this school is to grant admission to medical school directly from high school in a curriculum spread over six or more calendar years. By providing students with early and continuous patient-care experience, the curriculum fully integrates the teaching of liberal arts/humanities, basic sciences and clinical medicine. The environment for learning created at this institution de-emphasizes competition and encourages learning through close faculty-student interaction and student partnerships.

All medical schools are reviewed and accredited by the Liaison Committee on Medical Education, a national body representing the Association of American Medical Colleges and the American Medical Association. The academic philosophy and plan have been endorsed by this committee, and the school is fully accredited.

Philosophy

The fundamental purpose of medical schools is to educate physicians. The prime objective of all professionals, physicians included, is to apply a sophisticated body of knowledge and skills to the solution of problems faced by people. In doing so, the individual will follow self-imposed standards of performance – standards that will be higher than those required legally. The professional physician is a morally responsible, action-oriented problem solver on behalf of people.

The school does not separate the several obligations of a medical school: to educate the student, the house officer and the physician; to attract new talent to the health-care field and to persuade that talent to remain active and prepared; to maintain maximum standards of ethics and care; to have concern equally for the individual and for the community; and to foster inquiry, to find answers and to apply those answers.

Admissions Requirements In combination with the College of Arts and Sciences and the School of Biological Sciences, the School of Medicine offers a six-year program leading to baccalaureate and doctor of medicine degrees. The student is required to complete both degrees. The program is designed primarily for high school seniors who are entering college, but prospective students with no more than 24 semester hours of earned college credit can be considered for admission. The curriculum is scheduled for 35 weeks in the first year and 48 weeks in each of the remaining five years.

Applicants for admission to the year 1 level of the combined program must meet the freshman admission requirements of the University. Applicants to Year 1 must take the American College Test (ACT), including the ACT Student Profile. The mailing address for information on application to the six-year combined program: Admissions Office/Enrollment Services, 120 Administrative Center, 5100 Rockhill Road, Kansas City, MO 64110-2499. The actual location for the Administrative Center is 5115 Oak Street.

High school students wishing to enter this program should recognize that many other well-qualified high school students with strong science backgrounds also will be applying.

A student admitted to the combined program at UMKC is expected to meet the following admission requirements (one unit equals one year in class):

- Four units of English;
- Four units of mathematics; •
- Three units of science, including one unit of biology and • one unit of chemistry;
- Three units of social studies;
- One unit of fine arts;
- Two units of foreign language.

In addition, one-half unit of computer science is highly recommended. Students whose high school does not offer biology, chemistry, foreign language or computer science are encouraged to contact the Council on Selection at the School of Medicine.

A limited number of positions are available for students who have completed their baccalaureate degree. For admission requirements for entrance as an M.D.-only student, refer to the annual announcement available from the Office of Admissions/Enrollment Services.

An alternative path is available for extended study. Because this is a state-assisted university, primary

consideration is given to Missouri residents. However,

approximately 10 to 15 out-of-state students may be accepted.

Application Fee and Timetable for Applying

A \$35 application fee is required of all resident applicants. A \$50 application fee is required of all nonresident applicants. Completed application materials will be accepted during the following period:

Earliest date - Aug. 1 of the year preceding the fall semester for which applying.

Latest date - Nov. 15 of the year preceding the fall semester for which applying. (Applicants are urged to apply as soon after Aug. 1 as possible.)

Estimated Yearly Expenses

Fees	Years 1-2	Years 3-6
Resident Nonresident Room & Board Books & Supplies Medical Instruments (a one-time expense)	\$22,902 45,690 6,165 1,200	\$26,180 51,575 7,954 1,200 550

All statements as to educational fees and other expenses are by way of announcement only for the school years covered by this catalog and are not to be regarded as offers to contract on the basis of those statements, inasmuch as the University expressly reserves the right to change any and all fees and other charges at any time, without any notice being given in advance of such a change.

Library and Information Services

Information services, including periodicals, computer literature searching and a full range of innovative reference services, are available through the Health Sciences Library. For more information, see the section on Library Services.

Student Services

The School of Medicine's Office of Student Affairs coordinates a variety of support services that are available to all medical students. These include counseling, financial aid, student organizations and activities.

The Office of Student Affairs also provides career information to students and assistance in applying for postgraduate residency training programs.

The Council on Selection; the Minority Recruitment and Retention Committee; the associate dean for cultural diversity and minority programs; the associate dean of the Office of Medical Education and Research; and the assistant dean for student affairs work together in recruitment and retention of students, including minority students.

Students enrolled in the combined baccalaureate/medical degree program may participate fully in the services and activities provided to all UMKC students through the Office of the Vice Chancellor for Student Affairs.

The Office of Student Life, located in the University Center, coordinates the cultural, social and recreational programs of the campus. Also located on the Volker campus are the Center for Academic Development; the Women's Center; the Counseling, Health, and Testing Center; and Career Services.

Academic Support Services

The School of Medicine's Office of Student Affairs provides an added dimension of support to all medical students interested in improving their academic performance. The Medical School curriculum consistently provides increasingly challenging coursework, and students must continue to explore alternative study methods to meet these demands. The following services are offered:

Basic Science Study Groups

Study groups are available in the core basic science courses of the school curriculum. The groups consist of three to five students and a group facilitator/tutor, meeting once or twice a week. Test performance has consistently been enhanced for students actively participating in these groups. Therefore, all medical students are encouraged to participate fully.

Study-group leaders are selected on the basis of their own performance in the course, their abilities to communicate course content and the recommendations of course professors.

Additional Assistance

Individual assistance is available to medical students through a variety of means. Students may receive individual analysis of their study techniques, including reading comprehension; time management; short- and long-term retention techniques; and test-taking abilities. Analysis of a student's basic science knowledge is available through several computer-assisted programs. If required, individual tutoring may be available to supplement the assistance offered through study-group programs. Counseling support also is available to students with personal issues that may hinder their academic performance.

United States Medical Licensing Exam Step 1 Preparation Students preparing for Step 1 of the USMLE are offered a variety of programs to supplement their individual review of the basic sciences. These programs consist of discussion groups, interactive video review sessions, individual test-taking analysis and a Step 1 mock exam. In addition to academic preparation support, resources are available to help students manage the stress related to their preparation for the exam.

Workshops

Periodically, special workshops are arranged in response to student needs and interests.

Counseling and Advising

The School of Medicine has a number of personal and academic support systems in place to assist students at all levels of the program. The assistant dean for student affairs is available to students on the Volker campus for academic and personal guidance. There are two education team coordinators with offices on the Volker campus who help the first- and second-year students in curriculum planning and who are available to counsel them on personal problems. For additional counseling, a clinical coordinator is available to students during these two years.

Each group of 11 students has a physician-scholar (or docent) who instructs the students in medical coursework during the first two years and who also serves as a role model and personal counselor. Year 1 students are partnered with year 2 students as an additional support mechanism.

From year 3 through year 4, each student is a member of a 12-student unit assigned to a docent who teaches and counsels throughout these years of the curriculum. Each team of about 50 students, made up of four units, has an education team coordinator to advise about course selection and personal problems in consultation with the docent. In their third and fourth years, students are partnered with older students, who serve as senior partners in the students' last two years.

Peer Counselors

A group of medical students who have completed a training program in personal counseling is available to advise students in all levels of the program. They work with a faculty adviser.

Financial Aid

For the latest information on financial aid programs at UMKC see http://www.sfa.umkc.edu.

Medical Student Organizations

Medical Student Advisory Council

The MSAC serves as the student government body in the School of Medicine and is comprised of student-elected representatives who focus on promoting student interests, keeping the administration informed of student opinion and organizing social activities.

Student National Medical Association

The promotion of the interests of minority students is the foundation of the SNMA. Leadership development, social awareness, service to humanity and excellence as physicians are the major objectives of this group.

American Medical Women's Association

The AMWA promotes an understanding of the individual in medicine. Its membership is open to all interested men and women. AMWA's programs include speakers on special topics, field trips, social projects and other activities of benefit to all students.

American Medical Student Association

The primary goal of AMSA is the initiation of studentorganized projects for the benefit of medical students and the community on local, state and national levels. The development of hypertension clinics, presentations about venereal disease to area high schools, AIDS awareness programs and a drug-replacement program represent some of AMSA's projects in past years.

American Medical Association - Medical Student Section

Dedicated to representing medical students, improving medical education, developing leadership, and promoting activism for the health of America.

Association of American Medical Colleges - Organization of Student Representatives

The OSR is the student branch of the Association of American Medical Colleges (AAMC). The OSR is charged with the representation of the undergraduate medical student body of the United States to the academic medical community.

Asian Pacific American Medical Students' Association

The goals of APAMSA are to educate all medical students about health-care needs specific to the Asian Pacific community and to address issues important to Asian Pacific American medical students.

Christian Medical/Dental Society

This group is open to students of all faiths. The organization fosters greater understanding of spiritual concerns in relationship to health and well-being.

International Federation of Medical Students' Association

IFMSA's mission is to offer physicians a comprehensive introduction to global health issues. Through programming and opportunities, it develops culturally sensitive students of medicine, intent on influencing the transnational inequalities that shape the health of our planet. IFMSA is an international federation with broad representation and close relations with medical students' associations all over the world.

Publications

A monthly publication of the school, *P.R.N.*, provides information on school programs, policies, and student activities, and is distributed to School of Medicine students, their families and faculty. A quarterly magazine, *Panorama*, is primarily distributed to alumni, affiliated hospitals and friends of the school, and is available throughout the school.

Awards

- Alpha Omega Alpha National Scholastic Honorary Society; charter awarded in 1985 to UMKC School of Medicine
- American Academy of Neurology Student Prize for Excellence in Neurology
- American College of Emergency Physicians R. R. Hannas, M.D. Emergency Medicine Award
- American College of Physicians Book Award
- American College of Physicians Clerkship Award
- American Medical Women's Association Scholarship Achievement Citation
- Betty W. Hamilton Award for Excellence in Immunology
- Bryan Ross Bolden Memorial Scholarship
- Department of Surgery Award
- Drs. Beatty and Deloras Pemberton Scholarship
- Dr. and Mrs. Bharat Shah Academic Scholarship
- Edward J. Twin, M.D. Physician/Humanist Award
- Family Health Foundation of Missouri Achievement Award
- The Founding Dean's Founders Award
- The Lange Medical Publications Award
- The Laura L. Backus, M.D. Memorial Award for Excellence in Pediatrics
- The Leonard Tow Humanism in Medicine Awards presented by The Arnold P. Gold Foundation
- The Marilyn McGuyre Tournament Scholarship
- The Merck Manual Award for Outstanding Achievement in Medical Education
- Missouri State Medical Association Honors Graduate
 Award
- Pharmacology Achievement Award
- Rebecca Lefcourt, M.D. Award for Achievement in Ob/Gyn
- Ratilal S. Shah Medical Scholarship Fund
- Rebecca Lefcourt, M.D. Award for Achievement in Obstetrics/Gynecology
- Richard T. Garcia Memorial Award
- Richardson K. Noback Award for Clinical Excellence
- Roche Lab/Charles B. Wilkinson, M.D. Scholarship
- St. Louis Friends of UMKC School of Medicine Basic Science Award
- St. Louis Friends of UMKC School of Medicine Award for Research
- St. Louis Friends of UMKC School of Medicine Scholarship
- Shaffer Award for Community Service
- Dwight Stanford, M.D. Scholarship
- Society for Academic Emergency Medicine Award
- Thomas R. Hamilton, M.D. Memorial Award for Excellence in Microbiology
- Thomas R. Hamilton, M.D. Memorial Award for Excellence in Pathology
- UMKC School of Medicine Alumni Association Award for Excellence in Medical Education Award
- UMKC School of Medicine Alumni Association Outstanding Senior Partner Award
- UMKC School of Medicine Alumni Association Research Award
- UMKC School of Medicine Alumni Association Scholarship
- Western Friends of UMKC School of Medicine/Harry S. Jonas Ambassador's Award
- Western Friends of UMKC School of Medicine Scholarship

Curriculum

The fundamental objective of the School of Medicine is to graduate physicians able to meet the health care needs of Missouri and the nation.

Classes begin in the fall of year 1. By using 35 weeks of study the first year and 48 weeks every year after that, each student will have the opportunity to earn the credits necessary for both a baccalaureate and a medical degree. This six-year continuum does not make an arbitrary separation between liberal arts and professional education.

The first two years of the six-year curriculum are arranged for the student to blend three-fourths of the time in liberal arts coursework and one-fourth of the time in introduction to medicine coursework. This initial two-year period allows students adequate time to determine whether they are motivated enough to continue in medicine. At the same time, the faculty will have adequate opportunity to judge whether each student has the characteristics and capabilities necessary for a career in medicine.

The introduction to medicine courses during the first two years are designed to provide just that – an introduction to medicine. Special attention is given to the effect of illness on the patient, the family and the community. There is emphasis on the coordination of effort, the team approach, to the solution of medical and health care problems. The year 1 and 2 curriculum has been further enhanced with the addition of a geriatrics program which pairs students with aging mentors. The courses will integrate patient interviews and examinations with branches of science fundamental to clinical medicine, including anatomy, physiology, biochemistry, psychology and sociology.

These courses have certain coordinated objectives, each of which represents an important component in the general concept of medicine as applied to human biology. The objectives are to help students understand and learn about the following:

- The language and vocabulary of medicine;
- The effects of illness on individuals, families and communities;
- The background setting of illness and health care, including the importance of social, psychological and economic factors;
- The history of medicine and its present state;
- The roles and responsibilities of physicians and other personnel involved in health care;
- Selected content information from anatomy, physiology, chemistry, psychology, sociology and other sciences fundamental to medicine, together with the continuing importance of such information in the reasoning of the physician;
- The logic, rationale and process of clinical reasoning.

An important feature of the School of Medicine program is the early and continuing contact of the student with a team of scholars called docents. Each docent is a full-time physician responsible for the education of a small group of students. The docent serves as a role model for students as well as a guide and mentor. At year 3, students are assigned to a docent team, a group composed of students from each of year 3 through year 6 classes. Beginning in year 4, students spend two months each year on Docent Rotation, an internal medicine clerkship. During this time in particular, and throughout the rest of the academic year, the docents guide their students through the experiences necessary to acquire a strong foundation of clinical competence. Students in their third and fourth years are partnered with their fifth- and sixth-year peers on the docent unit. The School of Medicine program in years 3 to 6 of the combined degree program has several features:

- The core educational program is designed and directed by physicians who are primarily concerned with medical student education and who have patient care responsibilities;
- Since the curriculum core content is based on clinical experiences, the medical student's education will be problem-centered. Faculty from many University disciplines participate in teaching medical students, and education in the clinical sciences takes place in affiliated hospitals. These hospitals provide a communitywide model for patient care;
- The curriculum integrates liberal arts, basic sciences and clinical medicine. It uses planned repetition, reinforcement and relevancy to enable students to acquire the requisite attitudes, knowledge and skills expected of a Medical School graduate;
- Students may have an extended program by taking extra time;
- During the third through sixth years, students are required to return to the Volker campus at least two times, usually in years 3 and 4, to take liberal arts coursework. Students are also required to enroll in a 3-hour medical humanities or social science course in year 5 or year 6.

Typical Curriculum - Six-Year Program

Year 1

Medicine	
Fall	Medical Terminology
	Learning Basic Medical Sciences
	Introduction to Medicine I
Winter	Introduction to Medicine II
() Inter	Aging I
Arts & Scien	ces
Fall	Human Biology I (Anatomy) w/Lab
	General Chemistry I w/Lab
	Psychology
	Courses for B.A. Degree*
Winter	Human Biology III (Microbiology) w/Lab
	General Chemistry II w/Lab
	Sociology
	Courses for B.A. Degree*

Year 2 Madici

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Summer	Hospital Team Experience
	History of Medicine
Fall	Introduction to the Child
Winter	Introduction to the Woman
	Aging II
Arts & Sciend	ces
Summer	Organic Chemistry w/Lab
	Cell Biology

	Cell Biology
Fall	Human Biochemistry
	Sociology - Life Cycles
	Genetics
	Courses for B.A. Degree*
Winter	Structure/Function I & II - Anatomy & Physiology
	Courses for B.A. Degree*

Year 3

Medicine Clinical Skills Introduction to Pharmacology (Independent Study) CUES General/Clinical Pathology Medical Microbiology Medical Neurosciences Continuing Ambulatory Care Clinic

Arts & Sciences

Structure/Function III

Year 4

Medicine Pharmacology Behavioral Sciences in Medicine Docent Rotation Family Practice Ambulatory Care Pharmacology (Independent Study) Continuing Ambulatory Care Clinic

Arts & Sciences

Courses for B.A. Degree*

Year 5

Medicine Psychiatry Prescribing for Special Populations (Independent Study) Obstetrics/Gynecology Pediatrics Family Medicine Preceptorship Surgery Elective Docent Rotation

Year 6

Medicine Docent Rotation Emergency Medicine Rationale Drug Prescribing (Independent Study) Electives Continuing Ambulatory Care Clinic

Arts & Sciences Humanities/Social Sciences

* 3 to 12 credit hours will come from general degree requirements and/or core major requirements. All students are required to take three clinical electives, one of which must be direct patient care.

Requirements for Graduation

- 1. Minimum of 90 credit hours from the College of Arts and Sciences acceptable to the School of Medicine
- 2. Cumulative GPA of 2.7 to 4.0
- 3. Satisfactory completion, certified by the UMKC registrar, of requirements for the baccalaureate degree
- 4. Satisfactory completion of all required medical curriculum
- 5. Current certification in Advanced Cardiac Life Support
- 6. Three returns back to the College of Arts & Sciences
- 7. 38 months medical curriculum credit (34 for M.D.-only students)
- 8. Docent certification of clinical competence
- 9. Passing scores on USMLE Steps 1 and 2
- 48 months of enrollment in the School of Medicine, years 3 to 6 (including M.D.-only students)
- 11. Three clinical electives, one of which must be direct patient care

Conservatory of Music

Performing Arts Center 4949 Cherry Street (816) 235-**2900** conservatory@umkc.edu http://www.umkc.edu/conservatory

Mailing Address

University of Missouri-Kansas City Conservatory of Music 5100 Rockhill Road Kansas City, MO 64110-2499

Dean:

Randall G. Pembrook Associate Dean for Academic Affairs: William E. Fredrickson

General Information

History

The Conservatory is an active participant in mid-America's most important cultural center, Kansas City. This geographical setting provides students with the opportunity to hear and work with the Conservatory's own talented artist-faculty and internationally known artists who perform in the area.

The Conservatory of Music traces its lineage to a merger of two early Kansas City conservatories, the Kansas City Conservatory of Music and the Horner Institute of Fine Arts. A second merger in 1959 joined the Conservatory with the University of Kansas City. In 1963, the private University of Kansas City became a part of the state university system as UMKC, with the Conservatory as a component college.

Accreditation

The Conservatory of Music's degree programs are accredited by the National Association of Schools of Music (1933) and the National Council for Accreditation of Teacher Education (1961).

Advising

All undergraduate and graduate students should be advised by the appropriate student services coordinator or associate dean prior to any registration. All music education or therapy students should see a faculty member in music education/therapy for advising.

Studies in American Music

The UMKC Conservatory's Midwest Center for American Music, founded in 1967 as the Institute for Studies in American Music, stimulates interest in American music and encourages performances of works by American composers. To achieve these goals, a collection of books, manuscripts, research materials, musical scores and recordings has been assembled. Symposia, lectures and recitals are sponsored by MCAM to present different facets of American musical culture. Research projects in American music are encouraged, and several doctoral dissertations have been completed on research using materials from the institute's collection.

Ensembles

The Conservatory offers students the opportunity to participate in a variety of ensembles that perform throughout the year. More than 20 ensembles are open by audition to all University students who can qualify. The ensembles include: Conservatory Orchestra, Chamber Orchestra, Percussion Ensemble, Jazz Workshop, Jazz Orchestra, Jazz Band, Wind Symphony, Wind Ensemble, Pep Band, Graduate Chamber Choir, Conservatory Chorale, Symphonic Choir, Womens Chorus, Canticum Novum, Musica Nova, Opera/Musical Theatre Ensemble and Ensemble for Composers.

Professional Organizations

The Conservatory sustains chapters of national professional and honor fraternities, including Sigma Alpha Iota and Mu Phi Epsilon, and the national honor society, Pi Kappa Lambda.

The Conservatory maintains an affiliation with the National Federation of Music Clubs and with student chapters of MENC: The National Association for Music Education, the American Music Therapy Association, the International Association of Jazz Educators, the American Guild of Organists and the American Choral Directors Association.

Community Music & Dance Academy

The Conservatory's Community Music & Dance Academy has the mission of bridging the national reputation and excellence of the UMKC Conservatory of Music with the local musical needs of the Kansas City community. The Academy currently offers private and group instruction to 600 area musicians and dancers; coordinates camps and festivals for the Kansas City area and provides professional development through workshops and in-service to area educators and therapists.

The instructors in the Community Music & Dance Academy are professional educators, therapists, musicians and dancers. Many have advanced degrees or are current graduate students or professors at the University of Missouri-Kansas City Conservatory of Music. Academy faculty have trained with professional musicians within and outside the Conservatory and regularly perform as soloists or with ensembles locally, nationally and internationally. Some have even published and recorded their work. Most are active members of professional music organizations at the local, state and national levels.

Scholarships or Special Awards

Scholarships are available to Conservatory students and are awarded on the basis of ability (demonstrated at the audition) and academic standing. Scholarships are awarded for one year but can be renewed annually, provided students maintain the appropriate grade level, continue satisfactory performance in the major performance area, and participate in major ensembles as prescribed.

Applicants for Conservatory scholarships must complete all regular admissions procedures in order to be considered. Conservatory scholarship applications are included with the applicant's packet.

In accordance with the code of ethics of the National Association of Schools of Music, the acceptance of financial aid by a candidate is considered a declaration of intent to attend the institution, and each candidate will be so informed. The code further declares that such a student may not consider any other offer from an institutional member of the NASM except with the written consent of the music executive of the first institution. Similarly, a transfer applicant cannot be considered for financial aid without the written recommendation of the head of the music department from which the transfer is being made.

Graduate Programs

The Conservatory of Music offers graduate programs leading to the following degrees: master of arts in music; master of arts in music – music therapy; master of music in conducting, music composition, music history and literature, music theory, and performance; master of music education; and doctorate of musical arts in music composition, conducting and performance. The Conservatory participates in the Interdisciplinary Ph.D. program for students who desire music education as their coordinating discipline and education as a co-discipline. Graduate students in the Conservatory also are subject to the regulations, listed in the General Graduate Academic Regulations and Information section of this catalog.

Admission

Admission to the Conservatory of Music does not constitute an approval of major. Graduate students attending the Conservatory of Music do not have a major until divisional requirements are met and an approved planned program of study is filed.

Requirements for Admission

All students applying for admission must:

- Complete an application for admission;
- Submit transcripts of all prior work;
- Possess a minimum overall grade-point average of 3.0 (4.0 = A) for all prior coursework;
- Perform an applied audition, the purpose of which is diagnostic only, except as indicated in certain divisional standards.

Meet admission standards listed below:

- Choral Conducting
 - Master's and doctoral degrees: live interview/ choral conducting students are required to audition before enrolling in applied lessons, but may be admitted without an applied audition.
- Orchestral/Wind Conducting
 - Master's and doctoral degrees: live interview/applied audition.
- Master of Arts
 - Achieve Conservatory 302 at the audition or submit area of concentration approval form.
- Music Composition
 - Master's and doctoral degrees: submit portfolio of compositions for evaluation.
- Music Education
 - Master's degree: document completion of a bachelor's degree in music education or the equivalent/have an acceptable interview with faculty from this discipline/provide evidence of musical proficiencies applicable to music education settings.
- Music History and Literature
 - Master's degree:
 - 1. Possess a bachelor's degree in music.
 - 2. Possess a minimum grade-point average of 3.0 in undergraduate music history courses.
 - 3. Submit examples of writing skills, including term papers and a 1,000-word essay outlining reasons for pursuing this major.
 - 4. Perform an applied audition before enrolling in the first term.
- Music Theory
 - Master's degree:
 - 1. Possess a bachelor's degree in music theory or the equivalent.
 - 2. Possess a minimum grade-point average of 3.0 in undergraduate music theory courses.
 - 3. Perform a keyboard proficiency examination.
 - 4. Submit examples of writing skills.
 - 5. Translate a selection into English from either French or German using a dictionary.
- Music Therapy
 - Master's degree:

- (a) Possess a bachelor's degree in music therapy from an NASM- accredited institution or the equivalent. (b) Possess a bachelor's degree in music or music education from an NASM-accredited institution or the equivalent. Students who do not have the appropriate music therapy professional status must pursue a music therapy equivalency program of study that is inclusive of all undergraduate music therapy requirements before being admitted to the master of arts in music-music therapy degree may be granted by the music therapy faculty.
- 2. Have an acceptable interview with one or more members of the music therapy faculty.
- 3. Demonstrate leadership ability and music skills through a successful music therapy clinical presentation in a music therapy setting. This demonstration may consist of a live presentation observed by UMKC music therapy faculty, or a videotape of a session submitted to the music therapy faculty.
- Performance
 - Master's degree: achieve Conservatory 501 (Graduate Masters Performance) at the audition.
 - Doctoral degree: achieve Conservatory 601 (Graduate Doctoral Performance) at the audition.
- Performer's Certificate
 - 1. Possess a bachelor's degree in music.
 - 2. Achieve Conservatory 501 at the audition.
 - 3. Interview with faculty/coaches in the applied area.
 - 4. Submit a standard resume including performance experiences.
- Artist's Certificate
 - 1. Possess a master's degree in music or the appropriate equivalent as determined by applied faculty in the area.
 - 2. Achieve Conservatory 601 at the audition.
 - 3. Interview with faculty/coaches in the applied area.
 - 4. Submit a standard resume including performance experiences.

Matriculation Examination

The matriculation examination in dictation, music theory, and music history must be completed by the student before enrolling for the term of admission. Students must pass all sections of the exam *or* complete review courses (421A/B, 497JA/B with a grade of B- or higher) before enrolling in 500-level theory and history courses. This examination will be administered during the week before each term. In addition, composition majors at the master's and doctoral levels must complete matriculation examinations in counterpoint, orchestration, and electronic/computer music.

Graduate Assistantships, Fellowships and Scholarships

Graduate assistantships are available with stipends varying for the academic year depending upon assignment. Assistantships are available in accompanying, assessment, conducting, instrumental ensembles, jazz and studio music, keyboard skills, music appreciation, music composition, music education, music history and literature, music theory, percussion, pep band, piano, saxophone, recording/lighting, stage management and voice. Recipients are expected to devote 10 hours a week in assigned duties. Applicants for assistantships should have and maintain a minimum 3.0 (B) grade-point average. For information concerning other forms of student financial aid and scholarships, contact the

Conservatory Admissions Office (816) 235-2932

and the

Financial Aid and Scholarships Office University of Missouri-Kansas City 5115 Oak Street Kansas City, MO 64110-2499

Degree Requirements

Information concerning specific degree requirements is available upon request from the student services coordinator for graduate studies,

UMKC Conservatory of Music 4949 Cherry Street Kansas City, MO 64110-2499 (816) 235-**2900** or (816) 235-**2959**

Conservatory graduate students must maintain a 3.0 graduate grade-point average in order to remain in good standing. A maximum of two courses not exceeding three hours of credit in each course at the 500 or 600 level in which C's are received shall be acceptable for the planned program of any advanced degree. No grade lower than a 3.0 (B) is acceptable in the major field, except in the master of arts degree.

Ensemble Requirements

All graduate students in the master of music and doctor of musical arts performance degree programs must enroll in Conservatory Wind Ensemble, Conservatory Wind Symphony or Conservatory Orchestra for a minimum of two semesters if their major instrument is an orchestral instrument. Master of music students in vocal performance must participate in the Conservatory Graduate Chamber Choir or Symphonic Choir for a minimum of two semesters.

All graduate students in the doctor of musical arts conducting degree program are required to participate in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student.

Foreign Language Proficiency

Master's students in history, literature and theory, as well as doctoral students in composition, conducting and performance must satisfy language requirements for the degree.

For master's students in history and literature and theory as well as doctoral students in conducting and performance *who speak English as their first language*, a grade of B- (2.7) or better in a first semester, sophomore-level, foreign language course or C (2.0) work or better in each of two junior-level courses or in one senior-level literature or civilization course is viewed as an adequate demonstration of foreign language skills. Students must study French, German or Italian unless the substitution of another language is approved by a minimum of two-thirds of the supervisory committee. A language proficiency test, if provided by language instructors or departments, may be substituted for course requirements provided it documents language capabilities equivalent to the previously described courses. In such cases, a letter from the university language professor, describing the process and results, must be forwarded to the Conservatory associate dean for Graduate Studies. Doctoral students in conducting or performance *who speak English as a Second Language* (ESL) must achieve a score of 600 on the TOEFL exam. If students have not completed a TOEFL exam with a score greater than 600 before arriving at UMKC, they must complete a language test in English provided by UMKC's Applied Language Institute. All courses recommended by ALI must be successfully completed and a score of 600 on the TOEFL or the equivalent as determined by ALI must be achieved. This policy applies to all ESL students regardless of the number of years they have studied in the United States.

For doctoral composition students who speak English as their first language, a grade of B- (2.7) or better in a first semester, sophomore-level, foreign language course or C (2.0) work or better in each of two junior-level courses or in one senior-level literature or civilization course is viewed as an adequate demonstration of appropriate foreign language skills. A language proficiency test, if provided by language instructors or departments, may be substituted for course requirements provided it documents language capabilities equivalent to the previously described courses. In such cases, a letter from the university language professor, describing the process and results, must be forwarded to the Conservatory associate dean for Graduate Studies. Students who have demonstrated evidence of foreign language skills by passing one year of foreign language study at the college level, or by passing the final exam for a level two college foreign language course, may elect the following options for fulfilling their foreign language requirement: A grade of B- or better in CONS 534B Advanced Computer Music Language Study or 598B Research Problems in Computer Languages and Music. If one of these courses is used to fulfill the foreign language requirement, it cannot also be used as part of the Area of Concentration. Doctoral students in composition who speak English as a second language (ESL) must achieve a score of 600 on the TOEFL exam. If students have not completed a TOEFL exam with a score greater than 600 before arriving at UMKC, they must complete a language test in English provided by UMKC's Applied Language Institute. All courses recommended by ALI must be successfully completed and a score of 600 on the TOEFL or the equivalent as determined by ALI must be achieved. This policy applies to all ESL students regardless of the number of years they have studied in the United States.

Master's Degrees

The master of arts, master of music and master of music education degree programs require a minimum of 30 semester hours; at least 18 hours must be numbered 500 or above. No 300- or 400-level courses may be included in a master's program if required in the comparable baccalaureate degree at the Conservatory of Music. Conservatory 599 (Thesis), Conservatory 598 (Research Problems), or Conservatory 589 (Academic Portfolio) is required on all degree programs except performance. With the approval of the supervisory committee and the principal graduate adviser, students can transfer hours equal to 20 percent of the planned program from an accredited institution other than UMKC, but any such transfer credit must be less than seven years old at the time the degree is awarded. The official time limit for the completion of the master's degree is seven years.

The comprehensive examination must be taken during or after the last term of coursework. It is designed to last a total of eight hours and the content is at the discretion of the supervisory committee. The examination is offered during the fifth week of fall and winter semesters and may be scheduled during a summer session with the approval of the supervisory committee. If taken in the summer, the questions may not be graded until the Fall Semester. The student must be enrolled the term the comprehensive examination is administered.

Master of Music in Music Composition Required Courses

	2
Conservatory 500-600 Music History	3
Conservatory 500-600 Music Theory	3
Conservatory 533 Advanced Composition	
(three courses)	9
Conservatory 593 Introduction to Research	
and Bibliography in Music	3
Conservatory 599 Thesis*	4
Area of Concentration**	8
Electives	2
Total hours (minimum)	32

Note: Each master's student majoring in music composition must audition on an instrument or voice as part of the initial enrollment process. Based on the audition results, the applied music requirement will be as follows:

- 1. If the student qualifies for applied music at the 301 secondary level, no applied music is required.
- 2. If the student does not qualify for applied music at the 301 secondary level, the student must enroll in applied music in the same performing medium for two terms or until 301 secondary is completed.

*An appropriate composition. A score must be filed in the Conservatory Library.

**The Area of Concentration is developed by the student with guidance and approval of the supervisory committee as a part of the planned program. Examples include Applied Music/Ensemble Performance, Music Scholarship, Conducting (Choral and/or Instrumental), Music Technology and interdisciplinary courses.

Master of Music in Conducting Required Courses

Conservatory 400-500A Applied Music*	2-6
Conservatory 500-600 Music History	3
Conservatory 500-600 Music Theory	3
Conservatory 582 Advanced Choral Conducting	
(any two from 582 A B C)	4
Conservatory 583 Advanced Instrumental	
Conducting (any two from 583 A B C D) or	
Conservatory 586 Seminar in Orchestral or	
Wind/Band Literature (586 A or B)	4
Conservatory 587 Seminar in Choral Literature	
(select two from 587 A B C D E or	
Conservatory 459, Choral Literature)	4-5
Conservatory 593 Introduction to Research and	
Bibliography in Music	3
Conservatory 597A Master's Conducting	
Performance**	4
Conservatory 598 Research Problems	4 2
Electives	1-5
Total hours (minimum)	30

* (Choral Track Voice Requirement) The applicant must enroll in applied voice the first term of registration as a full-time, degree-seeking student. Progress will be measured by the following:

- 1. If the applicant qualifies for applied voice at the 500A level, a minimum of two credit hours is required.
- 2. If the applicant does not qualify for applied voice at the 500A level, the student must enroll in applied voice for three terms or until completion of the 500A level.

(Instrumental Track Applied Requirement) The applicant must enroll in applied music the first term of registration as a full-time, degree-seeking student. Progress will be measured by the following:

- 1. If the applicant qualifies for applied music at the 401 level, a minimum of two credit hours is required.
- 2. If the applicant does not qualify for applied music at the 401 level, the student must enroll in applied music for a minimum of two terms, until completion of the 401 level, or until graduation.
- 3. In addition, instrumental conducting majors will be required to enroll in two terms of applied music on other appropriate instruments, as advised by the conducting faculty.

** One public performance is required. One rehearsal or lecture demonstration is required.

Master of Music Education Required Courses

Conservatory 500-600 Music History or Theory*	3
Conservatory 574 History and Philosophy	
of Music Éducation	3
Conservatory 589 Academic Portfolio or	
Conservatory 599 Thesis	3
Conservatory 594A Introduction to	
Descriptive and Experimental	
Research in Music	3
Applied Musicianship**	2
Methods/Materials Advanced Courses	
(e.g., Conservatory 540x, 582x, 583x, 586x,	
587x, 596, Summer Workshops)	6
Electives	10
Total hours (minimum)	30

* MME students will be required to pass the appropriate portions of the matriculation exam before enrolling in any 500-level theory or history courses.

**MME students wishing to satisfy the Applied Musicianship requirement by taking lessons in their undergraduate applied area will be required to perform an applied audition prior to enrolling in the first term. Typically, these lessons will occur on a TBA arrangement with applied faculty during the fall or winter semesters. These students must complete a semester of applied lessons at no lower than the 402-2 level. Other students who wish to refine applied skills through pedagogy study (e.g., 491/591 or summer workshops) or through applied study on other instruments (e.g., 500C) will not be required to audition.

Master of Music in Music History and Literature Required Courses

Conservatory 500A Applied Music (or three terms in the same performing	
medium at any level)*	2
Conservatory 500-600 Music History (four	
courses, two periods and two of choice)	12
Conservatory 500-600 Music Theory	3
Conservatory 590 Special Topics: Advanced	
Research and Bibliography in Music	3
Conservatory 593 Introduction to Research and	
Bibliography in Music	3
Conservatory 598 Research Problems	3 2
Conservatory 599 Thesis	6
Conservatory 663 History and Development	
of Notation	3
Electives	1-3
Total hours (minimum)	35

* Elective credit may be substituted if Conservatory 500A (Applied Music) is achieved at the audition.

Language Requirements: French or German, which may be completed according to the options listed in this section of the catalog. Other languages may be approved by the music history and literature faculty.

Supervisory Committee: The supervisory committee, which consists of at least two music history faculty plus one other member, is assigned to approve the planned program of study and prepare and grade the comprehensive examination.

Graduate Approval of Major: Complete CONS 593 (Introduction to Research and Bibliography in Music) with a grade of A; complete one graduate-level music theory course and one graduate-level music history course with a grade of A in each course; and present a scholarly paper before a public forum on a topic agreed to in advance by the music history and literature faculty (the duration of the presentation is to be at least 20 minutes).

Master of Music in Performance Required Courses: Orchestral Instruments, Guitar and Keyboard Emphasis Areas

Conservatory 500-600 Music History	3
Conservatory 500-600 Music Theory	3
Conservatory 501 Applied Study*	4
Conservatory 593 Introduction to Research	
and Bibliography in Music	3
Conservatory 597 Master's Recital	
(two required)	8
Electives (Non-applied music course)	3
Electives	8
Total hours (minimum)	32

* A minimum of one semester of applied music (501) is required before the first recital. Conservatory 501 or 597 is required each semester of enrollment until the recital requirement is met.

All students whose major is an orchestral instrument must be enrolled in Conservatory Wind Ensemble or Conservatory Orchestra for a minimum of two semesters. Not more than one half the total hours counted toward the planned program may be in applied music and recitals. A maximum of two semesters of an ensemble can be counted on any master's planned program of study.

Master of Music in Performance Required Courses: Voice Emphasis

Conservatory 500-600 Music History	3
Conservatory 500-600 Music Theory	3
Conservatory 501 Applied Study*	4
Conservatory 547 History of Opera I	3
Conservatory 566 (A-D) Vocal Literature	
(one required)	2
Conservatory 593 Introduction to Research and	
Bibliography in Music	3
Conservatory 597 Master's Recital	
(two required)	8
Electives	6
Total hours (minimum)	32

* A minimum of one semester of applied music (501) is usually required before the first solo recital. However Voice Performance majors, with the approval of the Vocal Studies Division, may enroll in 597 (Master's Recital) any semester to receive credit for a major UMKC opera role.

Not more than one-half the total hours counted toward the planned program may be in applied music and recitals.

Participation for two semesters in a major choral ensemble is required.

The diction proficiency test for French, German and Italian must be passed.

Master of Music in Performance Required Courses: Woodwind Emphasis

Note: The five instruments covered in this degree shall be flute, oboe, clarinet, saxophone and bassoon.

Conservatory 501 Applied Music	
(Instrument #1)*	4
Conservatory 500A Applied (Instrument #2)**	2
Conservatory 500A Applied (Instrument #3)**	2
Conservatory 500-600 Music Theory	3
Conservatory 500-600 Music History	3
Conservatory 591,592 Advanced Pedagogy	4
Conservatory 593 Introduction to Research and	
Bibliography in Music	3
Conservatory 597 Master's Recital	8
Ensemble***/Electives	5
Fotal hours (minimum)	34

* A minimum of one semester of applied music is required before the recital. Not more than one-half of the total hours counted toward the planned program may be in applied music and recitals.

** A graded half recital during the second semester of study on instruments #2 and #3 is required.

*** Two semesters of participation in a major ensemble are required on instrument #1. One semester of ensemble participation each is required on instruments #2 and #3. **Note:** Jury approval of the 101(2) applied level on instruments #4 and #5 is required before graduation.

Master of Music in Music Theory Required Courses

Conservatory 524B Advanced Analysis II - Common Practice Period	3
Conservatory 524C Advanced Analysis III - Contemporary Period	3
Conservatory 526A Introduction to	
Schenkerian Theory and Analysis	3
Conservatory 526B Schenkerian Analysis	3
Conservatory 591G Pedagogy of Music Theory I	3
Music History (Graduate Level)	3
Conservatory 593 Introduction to Research and	
Bibliography in Music	3
Conservatory 599 Thesis	4
Conservatory 620 History of Music Theory I or	
Conservatory 621 History of Music Theory II	3
Electives	6
Total hours (minimum)	34
	34

Piano Proficiency Requirement:

The Conservatory's undergraduate piano proficiency requirement must be met.

Applied Music Requirement

Successful completion of one of the following is required:

- If the student qualifies for applied music at the 302 level, then no applied study is required.
- If the student does not qualify through audition for applied music at the 302 level, then the student must enroll for applied study for three semesters or until the 301 jury is passed.

Foreign Language Requirement

For all masters students in Music Theory, a grade of B- (2.7) or better in a first semester, sophomore-level, foreign language course or C (2.0) work or better in each of two junior-level courses or in one senior-level literature or civilization course is viewed as an adequate demonstration of foreign language skills. Students must study French, German, Italian or Latin unless the substitution of another langage is approved by a minimum of two-thirds of the supervisory committee. A language proficiency test, if provided by language instructors or departments, may be substituted for course requirements provided it documents language capabilities equivalent to the previously described courses. In such cases, a letter from the university langage professor, describing the process and results, must be forwarded to the Conservatory Associate Dean for Graduate Studies.

Master of Arts in Music Required Courses

Area of Concentration*	9
Conservatory 500-600 Music Theory**	3
Conservatory 500-600 Music History***	3
Conservatory 593 Introduction to Research and	
Bibliography in Music	3
OR	
Conservatory 594A Introduction to Descriptive	
and Experimental Research in Music	3
Conservatory 598 Research Problems	2
Conservatory 302 Applied Music****	2
Electives	8
Total hours (minimum)	30

* The area of concentration is developed by the student with guidance and approval of the supervisory committee as part of the planned program. Nine hours of work in one discipline must be completed. Examples of concentration areas include (but are not limited to): Arts Administration, Composition, Conducting, Education, History, Jazz and Studio Music, Performance, Theory and Therapy (equivalency).

** Elective credit may be substituted for students pursuing an area of concentration in music theory.

*** Elective credit may be substituted for students pursuing an area of concentration in music history.

**** If the applicant qualifies for applied lessons at the 302 level, a minimum of 2 credit hours is required. If the applicant does not qualify for applied lessons at the 302 level, the student must enroll in applied lessons for three terms or until completion of the 302 level. Students who chose a performance area of concentration must complete a minimum of one semester of 500A. A total of 9 hours of lessons/ensembles is required for an applied area of concentration.

Master of Arts in Music - Music Therapy

Conservatory 544 Advanced Clinical Experience Conservatory 545 Seminar in Music Therapy Conservatory 594A Introduction to Descriptive and	2 2
Experimental Research in Music	3
Conservatory 599 Thesis	3
Select one course from the following four:	
Conservatory 573 Administration of Music	
Education/Music Therapy	3
Conservatory 596 Theories of Learning Music	3
EDRP 505 Statistical Methods I	3
EDRP 502 Advanced Educational Psychology	3
Special Interest Areas (suggested options):	
Gerontology Certificate program	
Health Services Administration	
Gerontology Administration	
Counseling Psychology & Counselor Education	
Education	
Sociology	16
Electives (500 level Music Courses)	6
Total hours (minimum)	35

Performer's Certificate Required Courses

Lessons and Recitals (Solo Experiences)*	16
Chamber and Ensemble Work (Collaborative	
Experiences) and/or Prescribed Electives	8
Music Literature/Pedagogy**	3-5
Total hours (minimum)	27-29

* Instrumental and keyboard students: four hours of lessons and 12 hours of recitals. Voice students: eight hours of lessons and eight hours of recitals.

** Instrumental students, three hours; keyboard students, five hours; voice students, four hours.

Note: Voice students must pass the diction proficiency test in French, German and Italian.

Doctor of Musical Arts

Ordinarily, doctor of musical arts candidates will be expected to show from 75 to 90 hours of approved coursework beyond the bachelor's degree (including the master's degree) on their planned programs. Approximately 80 percent of the coursework on the planned program must be at the graduate level (500-600).

If it is of acceptable quality and appropriate to the student's program, graduate credit not to exceed more than one-half the total credit earned beyond the bachelor's degree may be transferred from another institution to a doctoral program. Except for courses included in the earned master's degree, work done at institutions other than UMKC must have been completed within nine years of the awarding of the degree. A D.M.A. or Ph.D. student must take and pass the doctoral comprehensive examination and advance to candidacy within five years from the beginning of doctoral coursework (within four years if entering with a master's degree in the same or closely related field). After the establishment of degree candidacy, a maximum of five years will be allowed for completion of degree requirements. All D.M.A. students must demonstrate proficiency in one foreign language and satisfy the residency requirement. Residency for the D.M.A. cannot begin until the first term of enrollment as a D.M.A. student at the Conservatory. The residency requirement for the D.M.A. may be satisfied in any one of the following ways: 1) two adjacent semesters with a minimum of nine hours each, or 2) one semester with a minimum of nine hours and two summer sessions with a minimum of five hours each, provided that the full-time semester is adjacent to one of the summer sessions [it is expected that the summer sessions will be consecutive], or 3) completion of 24 hours within 18 consecutive months.

The Supervisory Committee

The supervisory committee for students seeking the doctor of musical arts shall consist of three faculty members who will approve the planned program of study and the doctoral research plan, and agree to serve as the three faculty responsible for writing and grading the major portion of the doctoral comprehensive examination.

Comprehensive Examination

Before taking the written comprehensive examination, the planned program, residency, language requirement, coursework, doctoral research plan and other divisional requirements must be completed. The student must be enrolled during the term the comprehensive examination is administered and 30 consecutive days are allowed for its completion. This examination of 24 hours consists of 18 hours of in-depth scrutiny of the major field, prepared and graded by the supervisory committee, and an objective examination consisting of three hours of music history and three hours of music theory, prepared and graded by faculty from the Academic Studies and Composition Division. The music history and music theory portions are administered on the sixth and seventh Saturdays of the fall and winter semesters. The examination may be scheduled during the summer term with approval of the supervisory committee, but may not be graded until the fall semester. Each section of the music theory and music history examinations must be passed with a grade of Bor better. If a student does not achieve a B- or better on any section of these exams, he or she must retake that section. The comprehensive examination must be completed successfully before the dissertation topic is approved. Performance students must also successfully complete their comprehensive exams before the final recital is given. Students selecting doctoral research options (Conservatory 697 and 698) instead of the dissertation must complete at least one project after comprehensive exams are passed.

The Comprehensive Examination Committee

The comprehensive examination committee for students seeking the doctor of musical arts shall consist of three faculty members of the supervisory committee and any other faculty who have contributed and graded questions.

Doctor of Musical Arts in Music Composition Required Courses

Conservatory 500-600 Music Theory	
(three courses)	9
Conservatory 500-600 Music History	
(three courses)*	9
Conservatory 531 Advanced Orchestration	3
Conservatory 533 Advanced Composition	
(three classes)	9
Conservatory 533 Advanced Composition	
(one additional) or 534 Advanced Electronic	
Music Composition	3
Conservatory 593 Introduction to Research and	
Bibliography in Music	3
Conservatory 699 Dissertation Research**	6
Area of Concentration***	11

Language Requirement: A proficiency in one foreign language is required. See this section of the catalog for options. **Note:** Each doctoral student majoring in music composition must audition on an instrument or voice as part of the initial enrollment process. Based on the audition results, the applied music requirement will be as follows:

- 1. If the student qualifies for applied music at the 301 level, no applied music is required.
- 2. If the student does not qualify for applied music at the 301 level, the student must enroll in applied music in the same performing medium for two terms or until 301 secondary is completed.

* All doctoral students are required to complete three graduate music history courses. One must be a period course (Conservatory 555-559), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty.

** An extended work in a format approved by the composition faculty. Two copies of the full score must be placed in the Conservatory Library.

*** The Area of Concentration is developed by the student with guidance and approval of the supervisory committee as part of the planned program. Examples include Applied Music/Ensemble Performance, Music Scholarship, Conducting (Choral and/or Instrumental), Music Technology and interdisciplinary courses.

Doctor of Musical Arts in Conducting Required Courses

Conservatory 500A Applied Music* Conservatory 500-600 Music History**	2
(three required)	9
Conservatory 500-600 Music Theory (three required)	9
Conservatory 582 Advanced Choral Conducting (any three from 582 A B C)	6
Conservatory 583D Advanced Instrumental Conducting for Choral Majors	2
Conservatory 586 Seminar in Orchestral or	- 8
Wind/Band Literature(586 A or B) Conservatory 587 Seminar in Choral Literature	0
(any four from 587 A B C D E or Conservatory 459)	8(9)
OR	
Conservatory 583 Advanced Instrumental	
Conducting (three from 583 A B C D)	6
Conservatory 593 Introduction to Research and	
Bibliography in Music	3
Conservatory 697B Doctoral Conducting	
Performance*** (Two public performances	0
with supporting documents)	8
Conservatory 697/698/699**** Doctoral Research	4

Language Requirement: A proficiency in one foreign language is required. See this section of the catalog for options.

* Each doctor of musical arts conducting major must enroll in applied music the first term of registration as a full-time, degree-seeking student. If the applicant qualifies for applied music at the 500A level, a minimum of two credit hours is required. If the applicant does not qualify for applied music at the 500A level, then the student must enroll in applied music until completion of the 500A level or until graduation.

- 1. Choral conducting majors whose major applied music is not voice will be required to take three terms of applied voice at any level.
- 2. Instrumental conducting majors will be further required to enroll in two additional semesters of two different instruments at the 500B level as advised by the conducting faculty.

** All doctoral students are required to complete three graduate music history courses. One must be a period course (Conservatory 555-559), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty.

*** Conducting recitals may be done with the approval of the major adviser at any time after successful completion of the Graduate Approval of Major.

**** A minimum of one Doctoral Research Project, exhibiting the highest level of independence, must be finished after comprehensive examinations are successfully completed. Two rehearsal/lecture demonstrations must be completed. Participation in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student is required.

Doctor of Musical Arts in Performance Required Courses

-	
Conservatory 500-600 Music History	0
(three required)*	9
Conservatory 500-600 Music Theory	
(three required)	9
Conservatory 591 Advanced Pedagogy	2
Conservatory 593 Introduction to Research and	
Bibliography in Music	3
Conservatory 601 Applied Study**	4
Conservatory 697 Doctoral Recital	
(three required)***	12
Conservatory 697A Doctoral Lecture Recital	4
Conservatory 697/698/699**** Doctoral	
Research	4

Language Requirement: A proficiency in one foreign language is required. See this section of the catalog for options.

* All doctoral students are required to complete three graduate music history courses. One must be a period course (Conservatory 555-559), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty.

** A minimum of one semester of Conservatory 601, Applied Music, is required before the first solo recital. Voice performance majors, with the approval of the Vocal Studies Division, may enroll in 697 (Doctoral Recital) any semester to receive credit for a major UMKC opera role (one time only). *** Performance majors must enroll in Conservatory 601, Applied Music; Conservatory 697, Doctoral Recital; or Conservatory 697A, Doctoral Lecture Recital, each semester of registration until the recital requirement has been fulfilled. ****A minimum of one Doctoral Research Project, exhibiting the highest level of independence, must be finished after comprehensive examinations are successfully completed.

Notes on Required Courses

Voice majors must enroll in Conservatory 547, History of Opera (3.0 hours), and one from Conservatory 566A-D, Vocal Literature (2.0 hours). Voice majors must pass the diction proficiency test in French, German and Italian.

All students whose major is an orchestral instrument must be enrolled in Conservatory Wind Ensemble or Conservatory Orchestra for a minimum of two semesters.

A maximum of three semesters of an ensemble can be counted on any D.M.A. planned program of study.

Artist's Certificate Required Courses

Lessons and Recitals (Solo Experiences)*	16
Electives**	13
Total hours (minimum)	29

* Instrumental Students - Lessons=4 hours, recitals=12 hours; Keyboard Students - Recitals=16 hours (two solo, one concerto, one chamber); Voice Students - Lessons=4 hours, recitals, opera roles, and/or oratorio roles =12 hours. ** Instrumental Students - Students must participate or enroll in 4 large ensembles and 2 chamber ensembles; Keyboard

Students - Collaborative experiences, literature, and pedagogy courses are recommended; Voice Students - Opera workshop, vocal literature, history of opera, vocal pedagogy, related arts courses in theatre and art, as well as independent study experiences in language and performance are recommended. **Note:** Voice students must pass the diction proficiency test in French, German, and Italian.

Interdisciplinary Ph.D. Study in Music Education

The Conservatory participates in the interdisciplinary Ph.D. program for students who desire music education as their coordinating discipline and education as a co-discipline. Students with a background in music therapy can elect music education as their coordinating discipline and choose from a variety of possible co-discipline options.

Application is made through the School of Graduate Studies.

Conservatory of Music Courses

517 Advanced Opera Workshop (2).

523 Analytical Procedures (3). An introduction to recent methods of stylistic and formal analysis including twelve-tone, Schenkerian and set theoretic approaches.

524B Advanced Analysis II - Common Practice Period (3). Theory and analysis of selected works from the 17th through the mid-19th century. Prerequisite: Cons 523 or consent of the instructor.

524C Advanced Analysis III - Contemporary Period (3). Theory and analysis of selected works from the late 19th century to the present. Prerequisite: Cons 523 or consent of the instructor.

526B Schenkerian Analysis (3). Continuation of 526A emphasizing the acquisition of advanced skills in Schenkerian analysis. Prerequisite: Cons. 526A and consent of the instructor.

527 Advanced Counterpoint (3). Analysis and writing in 18th century style and forms including canon, invention and fugue.

528 Contemporary Harmonic/Contrapuntal Styles (3). Analysis and writing in contemporary styles. Prerequisite: CONS 428 or consent of the instructor.

529 Aspects of Time and Music (3). A course offering a broad-based, multi-disciplinary exploration of the natures of time preparatory to an in-depth study of some of music's primary temporal aspects; these focus on complex treatments of rhythm and meter in tonal music. Prerequisite: 523, 591G, or permission of instructor. Offered: Winter 2002

531 Advanced Orchestration (3). A study of the scoring techniques of such composers as Debussy, Ravel, Schoenberg, Bartok, and Stravinsky, and the application of these techniques by the student in scoring works for small and large ensembles. In the case of the composition major, detailed work in orchestrating original compositions will be required. Prerequisite: Cons. 431 or consent of the instructor. May be repeated for credit.

533 Advanced Composition (3). Intensive work in advanced composition in the large forms for various vocal and instrumental ensembles and orchestra. May be repeated for credit. Prerequisite: Consent of the instructor.

534 Advanced Electronic Music Composition (3). Creative, original composition of music in diverse styles utilizing the full range of equipment and techniques available. May be repeated for credit. Prerequisite: Consent of the instructor.

534B Advanced Computer Music Language Study (3). This course is designed to fulfill the computer language option of the foreign language requirement for DMA students in composition. Focus will be on development and mastery of skills in computer languages specifically related to musical composition, such as MAX or Csound, or in compositional uses of more general languages such as html, C, and Lingo. Prerequisite: Cons. 335 or consent of instructor.

534C Electroacoustic Music Aesthetics and Analysis (3). An overview of the context and practice of electroacoustic music in two parts: 1) new aesthetic parameters of sonic composition made possible by technology; and 2) creating a cogent analysis of a work by developing individual, personalized analytical tools. Offered in rotation with Cons. 534 (Advanced Electronic Composition) and 534b (Computer Programming for Musicians). Prerequisite: None Offered: Every 3rd semester

540A Seminar in Adv Music Education Methods for Elementry Teachers (2). A seminar in the design of music materials for K-6 students, preparation of elementary music teachers, and a review of elementary music literature and materials.

540B Advanced Methods in Instrumental Music (2). Organizational and rehearsal techniques for programs from the beginning bands and orchestras through high school and college ensembles. Includes information regarding methods, materials and program building.

540C Advanced Methods in Choral Music (2). Addresses the organization of secondary and college choral classes and ensembles. Areas of study include methods, materials and program building.

543 Psychology of Music (3). The study of psychological aspects of music including acoustical phenomena and factors affecting musical preference, perception and taste. A review of related literature and basic methodology for experimental investigation and quantification of related variables will be included. Prerequisite: None

544 Advanced Clinical Experience (2). Music Therapy practicum in a clinical area. Includes review of literature of that clinical area and presentation of materials and techniques used with clients.

545 Seminar in Music Therapy (2). Discussion of current trends in music therapy.

547 History of Opera I (3). A survey of opera from its origins to 1800. Prerequisite: Consent of the instructor.

551 History of the Oratorio (3). A study of the oratorio from its beginning through contemporary works.

555 Music of the Medieval and Renaissance Eras (3). Proseminar in the music of the Renaissance, from 1400 to 1600.

556 Music of the Baroque Era (3). Seminar in the music of the Baroque era, from 1600 to 1750. Prerequisite: CONS 593

557 Music of the Classical Era (3). Seminar in the music of the Classical era, from 1750 to 1828. Prerequisite: CONS 593.

558 Music of the Romantic Era (3). Seminar in the music of the Romantic era from 1828 to 1914. Prerequisite: CONS 593.

559A Music Since 1900: 1900-1945 (3). Seminar in music from 1900 to 1945. Prerequisite: CONS 593

559B Music Since 1900: 1945 to the Present (3). Seminar in music since 1945. Prerequisite: CONS 593

560A Seminar: History of Russian Vocal Music (3).

560B Seminar: Nineteenth-Century Nationalism in Music (3).

560C Seminar: History of American Music (3).

561 Advanced Music Literature (1-3). Survey of the literature of the appropriate instrument. May be repeated for credit. Prerequisite: Consent of the instructor.

566A Advanced Vocal Literature: French Melodies (2). In-depth study of the French melodies of Duparc, Faure, Debussy, Ravel, and Poulenc.

566B Advanced Vocal Literature: German Lieder (2). In-depth study of the German lieder of Schubert, Schumann, Brahms, Wolf, Mahler, and Strauss.

566C Advanced Vocal Literature: Nationalistic Art Songs (2). In-depth study of Nationalistic art songs of Russia, Scandinavia, Spain, and Middle Europe.

566D Advanced Vocal Literature: 20th Century Amer & Engl Art Songs (2). In-depth study of the 20th Century American and English art songs.

570 Music Education in the College Environment (3). A preparation for entering and functioning in the college Music Education teaching environment. Course serves as a review and examination of missions and philosophies of Music Education programs in U.S. colleges and universities and an analysis of job responsibilities for college Music Education instructors.

574 History and Philosophy of Music Education (3). An overview of the history of music education in this country from the beginning of the seventeenth century to the present. Also includes a discussion of the major philosophical models used to justify the study of music.

582A Advanced Choral Conducting - Technique (2). An introductory study of the techniques of choral conducting. An overview of conducting topics, including score preparation, rehearsal techniques and performance problems. May be repeated for credit.

582B Advanced Choral Conducting - Style (2). A study of conducting problems of music of the Renaissance, Baroque, Classic, Romantic and Twentieth century; further examination of performance problems associated with choral performances of madrigals, chamber music, a cappella works and music utilizing advanced compositional techniques. May be repeated for credit.

582C Advanced Choral Conducting-Rehearsal Techniques (2). An advanced study of methods and rehearsal procedures in the development and organization of choral performance; includes concepts of tone quality, diction, programming, and development of communication skills. May be repeated for credit.

583A Advanced Instrumental Conducting (2). An introductory study of the techniques of instrumental conducting. An overview of conducting topics, including score preparation, rehearsal techniques and performance problems.

583B Advanced Instrumental Conducting - Orchestra (2). A further study of the techniques of instrumental conducting, including such topics as string techniques, performance practice, baton technique and the art of accompaniment. Prerequisite: Cons 583A. May be repeated for credit.

583C Advanced Instrumental Conducting - Band (2). A further study of the technique of band conducting, including such topics as wind/percussion techniques, performance practice, baton technique, and contemporary wind chamber repertoire. Prerequisite: Cons 583A. May be repeated for credit.

586A Seminar in Orchestral Literature (2). Advanced study of a variety of styles, periods, and analytical procedures encountered by orchestral conductors. Content will vary from semester to semester. May be repeated for credit.

586B Seminar In Wind/Band Literature (2). Advanced study of a variety of styles, periods, and analytical procedures encountered by instrumental conductors of wind ensembles/bands. Content will vary from semester to semester. May be repeated for credit.

587A Seminar in Choral Literature-Middle Ages & Renaissance (2). Each seminar is concerned with the conductor's viewpoint of a segment of the literature from the specified historical periods and deals with analysis, interpretation, vocal problems, conducting problems, etc., of that literature. Prerequisite: Consent of the instructor.

587B Seminar in Choral Literature-Baroque and Classical (2). Each seminar is concerned with the conductor's viewpoint of a segment of the literature from the specified historical periods and deals with analysis, interpretation, vocal problems, conducting problems, etc., of that literature. Prerequisite: Consent of the instructor.

587C Seminar in Choral Literature-Twentieth Century (2). Each seminar is concerned with the conductor's viewpoint of a segment of the literature from the specified historical periods and deals with analysis, interpretation, vocal problems, conducting problems, etc., of that literature. PREREQUISITE: Consent of the instructor.

587D Seminar in Choral Literature-Large Forms Orchestral Accomp (2). Each seminar is concerned with the conductor's viewpoint of a segment of the literature from the specified historical periods and deals with analysis, interpretation, vocal problems, conducting problems, etc., of that literature. Prerequisite: Consent of the instructor.

587E Seminar in Choral Literature - Sacred (2). Each seminar is concerned with the conductor's viewpoint of a segment of the literature from the specified historical periods and deals with analysis, interpretation, vocal problems, conducting problems, etc., of that literature. Prerequisite: Consent of the instructor.

589 Academic Portfolio (1). Creative synthesis of coursework or clinical experience resulting in original products such as research documents, pedagogical materials, technology applications, music compositions or arrangements, and musical improvisation applications. Portfolio item may not include materials used to meet admission requirements. May be repeated for credit.

589A Academic Portfolio II (1). Additional coursework or clinical experience resulting in original products. Open only to students concurrently enrolled in CONS 589.

590 Special Topics (1-3). A seminar in selected topics in various fields and idioms of music. May be repeated for credit when the topic varies. Prerequisite: Consent of the instructor.

591C Advanced Pedagogy I - Organ (2).

591G Pedagogy of Music Theory I (3). Study of teaching techniques and materials combined with supervised teaching. Prerequisite: Consent of the instructor.

591H Advanced Pedagogy I - Voice (2).

591J Advanced Pedagogy I-General (2). An overview of basic pedagogical practice including modes of instruction, feedback, reinforcement, and assessment. Students will review current literature in this area and develop a project related to their own teaching. Prerequisite: none

591K Pedagogy of Music History (3). Techniques and materials related to teaching music history and music appreciation combined with supervised teaching. Prerequisite: Consent of instructor Offered: Every other Winter On Demand

592C Advanced Pedagogy II - Organ (2).

592H Advanced Pedagogy II - Voice (2)

593 Introduction to Research and Bibliography in Music (3). A survey of procedure in bibliography, research, and scholarly writing.

594A Introduction to Descriptive and Experimental Research in

Music (3). Introduction to basic descriptive and experimental methodologies in music. Includes a review of important literature in music, proposal writing, design, data analysis and scholarly writing styles used in graduate research.

596 Research in Teaching/Learning Music (3). A study of contemporary research in learning and teaching, its application to music, and the systematic observation and quantification of musical behavior. Prerequisite: None

597 Master's Recital (4).

597A Master's Conducting Performance (4).

597B Master's Recital II (4).

598 Research Problems (2). Individual study with a member of the adjunct, associate or graduate faculty. Study will culminate in the writing of a formal paper. Research projects must be completed within two consecutive semesters, and filed in the Music Library. The paper must be in agreement with the Conservatory Library's Format Guidelines for Music Dissertations and Theses.

598B Research Problems in Computer Languages and Music (1-3). Individual study with a member of the adjunct, associate, or graduate faculty. Study will culminate in the production of a project (computer program, CD-ROM,composition, or other document) that demonstrates skills in computer languages specifically related to music. This course fulfills the computer language option of the foreign language for DMA students in composition.

599 Thesis (1-9).

620 History of Music Theory I (3). A study of theoretical treatises, in the original languages and in translation, from earliest times through treatises on the thorough bass.

621 History of Music Theory II (3). A study of theoretical treatises, in the original languages and in translation, from the 18th-20th Centuries.

674 Music Administration in Higher Education (3). An historical survey of the music program in higher education, its philosophy, purpose and function; discussions of administrative problems of personnel, budget, public relations, recruitment, curriculum and development.

695 Practicum in Music Education (3-6). Individual conference course requiring the development of a research paper in a special subject and designed to resolve a practical problem of special interest to the student. Conference.

697 Doctoral Recital (4).

697A Doctoral Lecture Recital (4).

697B Doctoral Conducting Performance (4).

697BP Doctoral Conducting Performance Paper (1). Individual study with the student's conducting teacher. Study will culminate in the writing of a formal paper addressing aspects of a doctoral conducting performance.

697C Doctoral Recital II (1-4).

697CP Doctoral Recital Paper II (1). Additional individual study with the student's applied teacher. Study will culminate in the writing of another formal paper addressing aspects of a doctoral recital. Open only to students concurrently enrolled in CONS 697P.

697D Doctoral Conducting Performance II (1-4).

697DP Doctoral Conducting Performance Paper (1). Additional individual study with the student's conducting teacher. Study will culminate in the writing of another formal paper addressing aspects of a doctoral conducting performance. Open only to students concurrently enrolled in CONS 697BP.

697P Doctoral Recital Paper (1). Individual study with the student's applied teacher. Study will culminate in the writing of a formal paper addressing aspects of a doctoral recital.

698 Research Problems (2). Individual study with a member of the adjunct, associate, graduate or doctoral faculty. Study will culminate in the writing of a scholarly paper.

698A Doctoral Research Problems II (2). Additional study with a member of the adjunct, associate, graduate or doctoral faculty. Study will culminate in the writing of another scholarly paper. Open only to students concurrently enrolled in CONS 698.

698B Doctoral Music Product (1-4). Individual study with a member of the adjunct, associate, graduate, or doctoral faculty. Study will culminate in the writing of a creative, original composition, arrangement or edition of music.

699 Dissertation Research (1-16).

699A Dissertation Research (1-16).

899 Required Graduate Enrollment (1).

Accordion Courses

500A Graduate Accordion-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

Bassoon Courses

500A Graduate Bassoon-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Bassoon - Masters Performance (4).

601 Graduate Bassoon - Doctoral Performance (4).

Cello Courses

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Cello - Masters Performance (4).

601 Graduate Cello - Doctoral Performance (4).

Clarinet Courses

500A Graduate Clarinet-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This courses is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Clarinet - Masters Performance (4). 601 Graduate Clarinet - Doctoral Performance (4).

Euphonium Courses

500A Graduate Euphonium-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One-half hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Euphonium - Master's Performance (4).

601 Graduate Euphonium - Doctoral Performance (4).

Flute Courses

500A Graduate Flute-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One Half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Flute - Masters Performance (4).

601 Graduate Flute - Doctoral Performance (4).

Guitar Courses

500A Graduate Guitar-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One Half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Guitar - Masters Performance (4).

601 Graduate Guitar - Doctoral Performance (4).

Harp Courses

500 Graduate Harp - Secondary (1-2).

501 Graduate Harp - Masters Performance (2-4).

601 Graduate Harp - Doctoral Performance (2-4).

Harpsichord Courses

500A Graduate Harpsichord-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One Half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Harpsichord - Masters Performance (4).

601 Graduate Harpsichord - Doctoral Performance (4).

Horn Courses

500A Graduate Horn-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. an audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One Half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate French Horn - Masters Performance (4).

601 Graduate Horn - Doctoral Performance (4).

Oboe Courses

500A Graduate Oboe-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One Half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Oboe-Master Performance (4).

601 Graduate Oboe - Doctoral Performance (4).

Organ Courses

500A Graduate Organ-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One Half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Organ - Masters Performance (4).

601 Graduate Organ - Doctoral Performance (4).

Percussion Courses

500A Graduate Percussion-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One Half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Percussion - Masters Performance (4).

601 Graduate Percussion - Doctoral Performance (4).

Piano Courses

500A Graduate Piano-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Piano - Masters Performance (4).

601 Graduate Piano - Doctoral Performance (4).

Saxophone Courses

500A Graduate Saxophone-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Saxophone - Masters Performance (4).

601 Graduate Saxophone - Doctoral Performance (4).

String Bass Courses

500A Graduate String Bass-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate String Bass - Masters Performance (4).

601 Graduate String Bass - Doctoral Performance (4).

Trombone Courses

500A Graduate Trombone-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Trombone - Masters Performance (4).

601 Graduate Trombone - Doctoral Performance (4).

Trumpet Courses

500A Graduate Trumpet-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Trumpet - Masters Performance (4).

601 Graduate Trumpet - Doctoral Performance (4).

Tuba Courses

500A Graduate Tuba-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Tuba - Masters Performance (4).

601 Graduate Tuba - Doctoral Performance (4).

Viola Courses

500A Graduate Viola-Secondary (2).

500B Special Applied Studies (2). One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Viola - Masters Performance (4).

601 Graduate Viola - Doctoral Performance (4).

Violin Courses

500A Graduate Violin-Secondary (2).

500B Special Applied Studies (2). One hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Violin - Masters Performance (4).

601 Graduate Violin - Doctoral Performance (4).

Voice Courses

500A Graduate Voice-Secondary (2).

500B Special Applied Studies (2). One hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit. Consent of the instructor required.

500C Applied Study of a Second Instrument (1). One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required. Consent of the instructor.

501 Graduate Voice - Masters Performance (4).

601 Graduate Voice - Doctoral Performance (4).

School of Nursing

Health Sciences Building 2220 Holmes Street Hospital Hill Campus (816) 235-**1700** Fax: (816) 235-**1701** nurses@umkc.edu http://www.umkc.edu/nursing

Mailing Address

University of Missouri-Kansas City School of Nursing 2220 Holmes Street Kansas City, MO 64108-2676

Dean:

Lora Lacey-Haun Associate Dean for Graduate Studies: Katharine Smith Associate Dean for Undergraduate Studies: Thad Wilson

History

In 1973-74, a graduate nursing program was started under the aegis of the School of Graduate Studies. On Nov. 16, 1979, the Board of Curators approved a proposal to establish a school of nursing at the University of Missouri-Kansas City. In 1981, following a developmental period, two new curricula were implemented. These were an upper-division baccalaureate degree for registered nurses and a master's degree program. In 1992, the Board of Curators approved the offering of an inter-campus, cooperative doctoral program in nursing (Ph.D. N.D.). The doctoral curricula was implemented on the Kansas City campus in the Fall Semester of 1995. In 2000, the Board of Curators approved the offering of a pre-licensure baccalaureate degree program beginning in the Fall Semester of 2001.

Accreditation

The Bachelor of Science in Nursing (B.S.N.) and Master of Science in Nursing (M.S.N.) programs are accredited by the Commission on Collegiate Nursing Education (CCNE).

Facilities

The University of Missouri-Kansas City has extensive educational facilities on the Volker campus combined with the health care educational facilities and main office on the Hospital Hill campus. These include libraries, resource centers, audiovisual resources, data processing and science information specialists. The affiliated clinical facilities include Truman Medical Center, Children's Mercy Hospital and nearly 100 community-wide facilities in the Kansas City metro area.

Admissions

The Office of Admissions is located in Room 120, Administrative Center, 5115 Oak Street. Applicants should complete the regular UMKC application for admission, as well as a supplemental application to the School of Nursing.

Applications and transcripts should be mailed to the UMKC Office of Admissions, 120 Administrative Center, 5100 Rockhill Road, Kansas City, MO 64110-2499.

The School recommends that applicants who wish to be enrolled for the summer or fall semesters apply for admission and have all application materials sent by February 1. Applicants who wish to enroll for the winter semester should have all application materials sent by September 1. Applications received after that date may or may not be reviewed depending on available space. Nurse practitioner and clinical nurse specialist applicants (with the exception of the pediatric nurse practitioner program option) wanting full-time study must begin in a summer semester. Once admitted, all official University communication is conducted via UMKC e-mail.

Financial Assistance

The School of Nursing offers a range of scholarships, traineeships and other funds for both full- and part-time graduate and undergraduate nursing students. Students who complete the Free Application for Federal Student Aid (FAFSA) are eligible for the following:

- Helen Blond Scholarship;
- Laura Larkin Dexter Scholarship;
- Hedgepeth Scholarship;
- John S. Waggoner Memorial Nursing Scholarship;
- DHHS Public Health Service Professional Nurse Traineeship (when available).

Other funds may be available for students demonstrating financial need. Applications for nursing scholarships are considered after submission of the FAFSA. Further information about applications and qualifications for any of these funds may be obtained from the School of Nursing Student Services Office, Room 123, 2220 Holmes, Kansas City, MO 64108-2676.

International Students

The School of Nursing coordinates recruitment, retention and continuing advisement for nursing students from abroad in cooperation with the University's Office of International Student Affairs. In addition to the English proficiency examination (TOEFL), all graduates of foreign schools of nursing must complete the Commission on Graduates of Foreign Nursing Schools (CGFNS) qualifying examinations and the National Council Licensure Examinations (NCLEX) for licensure as a registered nurse in Missouri. Information about specific requirements for admission and progression may be obtained from the School of Nursing Student Services Office. The School of Nursing retains the right to assess the level of current clinical skills prior to enrollment in clinical coursework.

Organizations

Student Nurses Organization

Membership in the Student Nurses Organization (SNO) is automatic for all students admitted and enrolled in the School of Nursing. Officers and representatives to the school's standing committees are elected annually. Council meetings and special events are held periodically throughout the academic year.

Sigma Theta Tau International, Lambda Phi Chapter

This international nursing honor organization is designed to recognize and encourage superior scholarship and leadership achievements in nursing. Students are eligible for consideration as senior undergraduate students and as continuing graduate students. Membership, based on scholarship, is by invitation only. The induction of new members is held each spring.

Nursing Alumni Association

All students at the School of Nursing qualify for membership in the Nursing Alumni Association. Objectives of the alumni association are to provide mentoring to the student body and garner support for the school. Meetings are held periodically and officers are elected each spring by the Nursing Alumni Board.

Program Changes

The School of Nursing reserves the right to make changes in courses, degree requirements and course schedules without notice.

Master of Science in Nursing (M.S.N.)

The School of Nursing offers nine program options leading to the master of science in nursing degree. Graduate education in nursing opens doors of opportunity in new and expanding fields of health care. A master's degree forms the basis for advanced nursing practice, continued professional development and further graduate study. The nurse specialist is an expert in a discrete area of nursing practice. Students are admitted to one of the following program options provided a cohort group is available:

- Adult Clinical Nurse Specialist (42 credit hours);
- Adult Nurse Practitioner (42 credit hours)**;
- Family Nurse Practitioner (42 credit hours)**;
- Neonatal Nurse Practitioner (43 credit hours);
- Nurse Administrator (36 credit hours);
- Nurse Educator (38 credit hours);
- Nurse Midwifery (57 credit hours)*;
- Pediatric Nurse Practitioner (42 credit hours);
- Women's Health Nurse Practitioner (42 credit hours).

*Offered in cooperation with the University of Kansas School of Nursing.

**Students in this program must submit copies of their RN licenses for both Missouri and Kansas during clinical coursework.

Admission Criteria

Each applicant must meet the following criteria for admission:

- B.S.N. from a NLNAC or CCNE accredited college/university-based program or from a B.S.N. program comparable to the UMKC School of Nursing B.S.N. program. (Applicants who have graduated from a non-nursing accredited baccalaureate program, and who meet all other admission critiera, will be admitted on probation until completion of specific coursework at the school);
- Current licensure as a registered nurse in the United States and eligibility for licensure in Missouri. If applying to the adult or family nurse practitioner program option, must be eligible for licensure in both Missouri and Kansas;
- Minimum cumulative GPA of 3.2 (4.0 scale);
- Pediatric Nurse Practitioner applicants must have at least one year of full-time equivalent clinical practice in the area of clinical specialization within the three years prior to admission to the graduate program to be eligible to be admitted in the specified program option;
- Neonatal nurse practitioner applicants are required to have at least the equivalent of two years full-time clinical experience with high-risk neonates in the past five years. Neonatal Resuscitation Program (NRP) certification is required;
- Completion of supplemental admission requirements.

M.S.N. Degree Requirements

Required courses vary for each program option and are available upon request in the Nursing Student Services Office. Students have the option to attend full-time or part-time. Nurse practitioner and clinical nurse specialist students choosing to attend full-time must begin in a summer semester. The exception to this are the pediatric nurse practitioner students who begin full-time study in the fall semester.

UMKC Graduate Outreach Program

Program and Distant Site Programs

The University of Missouri-Kansas City School of Nursing offers outreach education to St. Joseph, Mo., and Joplin, Mo. Using a combination of distance education technology and on-site teaching, students are able to complete the master's family nurse practitioner program at the outreach site. Students desiring another clinical area of study may complete core coursework at the outreach site, but will be required to come to Kansas City for their clinical or program specific coursework.

Ph.D. in Nursing

The Program

The Ph.D. program is based upon the beliefs that nursing is a science, that scholars in the field must receive the necessary advanced preparation to develop as scientists, and that doctoral education, the means by which scholars are developed, is best accomplished in a milieu where the faculty-student relationship culminates in a partnership of inquiry. The curriculum of the doctoral program, therefore, is organized to provide a course of study as well as an individualized sequence of research and scholarly development. Students complete both a course of study and a series of progression requirements.

The curriculum is designed to interrelate three categorical areas of knowledge with three discrete substantive areas of nursing knowledge. These are:

Categorical

- 1. Modes of Inquiry
 - Research and Inquiry
 - Nursing Research and Inquiry
- 2. Nursing Content Areas
 - Nursing Theory and Analysis
 - Nursing Applied Science
- 3. Collateral
 - Collateral area(s)

Substantive

- 1. Health Promotion and Protection
- 2. Health Restoration and Support
- 3. Health Care Systems

A maximum of 11 to 19 academic credit hours from a master's program can be applied toward the Ph.D.

The Program Objectives

The nurse scholars prepared in this program will:

- Serve as leaders in nursing and health care; and
- Function as nurse scientists to advance the body of knowledge that guides the practice of nursing and contributes to interdisciplinary knowledge.

The Cooperative Features

A general curricular framework is shared between the University of Missouri-Kansas City, the University of Missouri-Columbia and the University of Missouri-St. Louis Schools of Nursing. Courses are cross-listed by the campuses to enhance program flexibility and provide students the enriching opportunity of selecting course offerings from all three campuses. Specific courses will be offered across campuses on a regular basis to give students the benefit of faculty expertise on all three campuses. Students may select doctoral program committee members from the other campuses. Faculty from more than one campus may join in teaching the doctoral program seminars.

Admission Requirements

Students may apply to the program as either post-B.S.N. or post-M.S.N. students. Applicants will be evaluated for doctoral nursing studies according to the following criteria:

- Grade-point average;
- Graduate Record Examination;
- Three letters of reference; and
- Interview and original essay by invitation.

Academic Regulations - All Programs

Nursing students are expected to be familiar with the policies and procedures specific to their level of study and to review these each semester for updates and changes. These can be found in the UMKC General Catalog and in the School of Nursing's Policies and Procedures manual, which can be found at the "Policies" link on the School's home page (http://www.umkc.edu/nursing).

Academic Dishonesty

Students in the School of Nursing abide by the University of Missouri Student Conduct Code (listed in the appendices of this catalog).

Advisement Policy

Each student is assigned a faculty adviser upon entry to the School of Nursing, whose role is to advise on professional matters. If a student is experiencing difficulty in academic, financial or professional matters, the adviser is available to assist the student.

Immunization/Confidentiality/AIDS Policy

Prior to enrollment in coursework, all students must submit a copy of their nursing license. In addition, **all students** must sign the "Personal Responsibility Statement" which attests to the student's understanding of the general catalog, program guides, policies, and maintaining confidentiality during clinical rotations. It also verifies their understanding and knowledge of the UMKC AIDS policy and Center for Disease Control Universal Precautions for the prevention or the transmission of AIDS and other infectious diseases in client care.

Prior to enrollment in a clinical course, students must also submit written documentation of a TB skin test within the last 12 months, MMR or titer showing immunity, tetanus/diphtheria within the last 10 years, completion of the Hepatitis B series, their current Basic Cardiac Life Support Certification card (or Neonatal Resuscitation Program Certification card), criminal background check, possible drug screen, and other documentation as required by the clinical agency. Additionally, students in the adult or family nurse practitioner programs must submit copies of both their Missouri and Kansas RN licenses. Failure to submit this information will result in the student's inability to enroll in clinical courses (or removal from a clinical course), which could jeopardize completion of the student's program of study as planned. Graduate students must also be able to meet minimum expectations for performance in clinical coursework and professional nursing.

Leave of Absence

Under specific circumstances, students may be granted a leave of absence for one semester. A request for a leave of absence should be submitted to the appropriate Nursing Program Committee no later than two weeks prior to the beginning of the semester for which the leave is requested. In the event of unexpected emergencies, students may petition the appropriate Nursing Program Committee for a leave of absence within the semester in which the coursework is to be dropped. Petition forms can be obtained from the Nursing Student Services Office.

Students who have been granted a leave of absence must submit a Request to Re-Enroll Form. Enrollment in clinical courses may be affected and may extend the student's matriculation. If the leave occurs during the clinical sequence, students are responsible to re-enter clinical coursework at the same level of competency as their peers who were not on leave.

Students who do not maintain continuous enrollment (exclusive of summer sessions) will be required to complete an

application for re-admission to the University and the School of Nursing and are liable for any intervening curriculum changes.

This leave of absence provision does not apply to graduate students who have completed all courses on their planned program of study. These students must follow the General Graduate Academic Regulations for "Continuous Graduate Enrollment Requirement" and "Continuous Graduate Enrollment (899).

M.S.N. Academic Regulations Academic Progression

Students in the M.S.N. degree program are governed by the policies of the General Graduate Academic Regulations and Information contained in this catalog. Relevant policies include: Graduate Probation Policy; Continuous Enrollment Policy; Ineligibility for Further Graduate Study; Policy on Repeated Graduate Credit Courses and Minimum Regulations Governing Master's Degrees and Time Limit on Degree Credit. In addition, students must adhere to policies of the School of Nursing, including Academic Progression-M.S.N., which outlines the procedure to be followed when students receive a grade of less than 3.0 in their nursing courses.

School of Nursing Courses

512 Values in Health Care Decision Making (2). This course explores values and beliefs as they shape advanced nursing practice and influence clinical decision-making and interventions. It builds upon and expands students' basic knowledge of values and ethics-related terminology, theories of moral development, and ethical decision making models for clinical practice. The values inherent in the development of advanced practice nursing are explored, and students examine their own understanding of the moral nature of advanced practice nursing. The underlying values of health care systems are analyzed for their impact on communities, society, and the health professionals. Core concepts for the course includes: philosophical inquiry, values clarification, ethical analysis, decision-making, and conflict resolution. Prerequisites: Admission to the MSN program or permission of instructor.

513 Health and Society (2). This course provides the foundation for understanding relationships between sociocultural factors and health/illness beliefs and practices of individuals/families/communities from diverse backgrounds. Health related views and practices of folk health care, complementary health care, and professional health care systems will be examined. Methods for promoting delivery and management of culturally congruent health care, based on cultural theories and research will be discussed. Core concepts for this course include: culture, diversity, culturally congruent care, folk health care systems, social systems, communication theories, complementary health care systems, professional health care systems. Prerequisites: Admission to the MSN program or permission of instructor

514 Policy, Organization, and Financing of Health Care (2). Presents an overview of health care policy, organization, and financing with emphasis on current health care trends. Attention is given to the relationship between these issues and improving nursing health care delivery and outcomes of client care. Core content: organizational change, legislative process, health care delivery systems. Prerequisites: SAme as in current catalog.

515NA Role of the Nurse Administrator (3). This course builds upon the fundamentals of advanced practice nursing by focusing on the subrole of the nurse administrator. Content focuses on essential knowledge for today's senior and executive level manager in health care. Core content are principles of administration, resource management, managed care, budgeting, marketing, health care delivery system evaluation, and utilization of theory and research. This course consists of three hours of lecture/discussion per week. Due to the experiential learning activity associated with time spent with a nurse leader this class meets every OTHER week. Prerequisite: Admission to the MSN program or permission of instructor.

515NE The Role of the Nurse Educator (2). This course will explore the role of the nurse educator. Emphasis will be the development and evaluation of the nurse educator in the functional areas of community education, staff education, and academic education. In each of these areas topics such as role transition, productivity, job duties/responsibilities, and role enactment evaluation, will be discussed and compared one to the other. Core content includes: role theory, subroles of the nurse educator (leader, learning facilitator, collaborator/consultant, inquirer, and clinical expert), adult education

philosophy, the effect of education research on nurse education and trends of nursing education. Prerequisite: Admission to the MSN program or permission from instructor. **515SP Role of the Clinical Specialist/Nurse Practitioner (2)**. This course will focus on issues affecting the merging roles of the nurse practitioner and clinical nurse specialist. It is designed to facilitate the role development of nurses who desire to function as primary care providers and/or as specialists within a specific clinical area of advanced nursing practice. Core concepts include subroles of advanced practice (leader, consultant, expert, researcher, educator), legal and professional issues, change theories, and standards of practice. Prerequisites: Admission to the MSN program or consent of instructor.

516 Curriculum Development (2). This course is designed to facilitate curriculum development and evaluation for the nurse educator functioning in a variety of settings such as academia, staff development, and community education. The historical development of curriculum will be discussed. Furthermore, several definitions of curriculum will be identified and contrasted in relation to curriculum development and evaluation. Development of classes, courses, and programs will be differentiated and discussed in relation to the learner, regulatory bodies, and desired learning outcomes. Core content will include: pedagogy and andragogy, components of curriculum, steps of curriculum development, accrediting bodies appropriate to the setting, and development of an evaluation plan. Prerequisites: Admission to the Master of Science in Nursing program or permission of instructor.

517 Teaching Strategies (2). This course is designed to explore a variety of instructional and testing/evaluation methods used by nurse educators in academia, staff development, and community education. Emphasis will be placed on the rationale for selection of appropriate instructional methods in relation to learning theories, the learners, the content, and the evaluation methods. Each instructional method will be discussed in terms of preparation, time frame, appropriateness, techniques and evaluation. Core content will include: theories of learning, principles of adult learners, learning objectives for the classroom, community and clinical settings, development of appropriate audiovisuals, and student evaluation in both the classroom and clinical settings. Prerequisites: Admission to the Master of Science in Nursing program or permission of instructor.

518 Curriculum Development and Teaching Strategies (3). This course examines the theoretical base for development of the nurse educator role for undergraduate nursing education. Concepts of learning, instructional design, and curriculum design are examined. Issues in higher education and nursing education are considered as they impact the design of instruction for nursing. This is one of three courses in a series to prepare beginning nurse educators undergraduate nursing education. Students will be introduced to curriculum development, instructional design, teaching strategies, and evaluation methods. Prerequisite: BSN Degree

519 C & I Field Experience (1). This one credit hour study will provide the student the opportunity to apply various principles of curriculum development and evaluation to various types of educational programs including staff education, community education and associate degree education. Prerequisite: N518

526 Health Promotion Across the Lifespan (3). This course is designed to provide students with a strong knowledge base related to concepts of health promotion and health protection for clients across the life span. Clients are conceptualized as individuals, families and populations. An application of various developmental theories for the child, adult, older adult and family will provide the basis to individualize health-care needs for various age and family groups. Core concepts for the course include: theories of health and health promotion and protection, reasoned action, health belief model, epidemiology, disease and injury privation, health education, growth and development, nutrition, and family systems theory. Prerequisites/Co-Requisites: N520 Theoretical Foundations in Nursing and any three of the following four courses: N512 Values in Health Care Decision Making; N514 Policy, Organization and Financing of Health Care; N513 Health and Society; N515NS/NP or N515E or N515A Role Courses.

530 Experience of Health in Aging (3). Theoretical and empirical knowledge of the aging process is presented. This knowledge is utilized on health. Topics include physiological changes in aging, thinking and feeling, intimacy, intergenerational caregiving, loss, grieving, and coping. This knowledge also is utilized in proposing strategies for health promotion, restoration, and maintenance in the aging population. This class meets two-three hours a week. Additional field experiences involve dialogues with an aging adult. Instructional class activities include lecture, group discussion, written reactions, and dialogue with visiting experts.

547A Hith Assessment and Clncal Reasoning for Advnced Nursing Practice (3). This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of individuals. The course builds on basic health assessment skills and emphasizes advanced assessment skills, lab work interpretation, validation, documentation and analysis of assessment findings. This course consists of 2 hours of lecture/discussion and 1 hour of clinical/lab credit. Prerequisites: N401 (or equivalent) and consent of instructor/ videotape and physical exam write-up. **547C Hith Assessment & Cincal Reasoning for Advnced Pediatric Practice (3)**. This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of individuals. The course builds on basic health assessment skills and emphasizes advanced assessment skills, lab work interpretation, validation, documentation and analysis of assessment findings. This course consists of 2 hours of lecture/discussion and 1 hour of clinical/lab credit. Prerequisites: N401 or consent of instructor/videotape and/ physical exam write-up.

547F Hith Assessment and Clncal Reasoning for Advnced Nursing Practice (3). This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of individuals. The course builds on basic health assessment skills and emphasizes advanced assessment skills, lab work interpretation, validation, documentation and analysis of assessment findings. This course consists of 2 hours of lecture/discussion and 1 hour of clinical/lab credit. Prerequisites: N401 (or equivalent) and consent of instructor/ videotape and physical exam write-up.

547N Advanced Health Assessment of the Neonate (3). A developmental and systematic approach to the advanced assessment of physiological, psychological, sociocultural and developmental aspects of the fetus, mother in the prenatal period, and the neonate is discussed. The approach builds on basic assessment skills and emphasizes perinatal, genetic, and embryologic factors impacting neonatal development. Ways to assess the pregnant woman for problems, the use of special diagnostic tests, and the assessment of the neonate also are expected. This course requires 40 hours of laboratory/clinical activities during the semester, which provide opportunities to implement various assessment and diagnostic procedure, complete a perinatal history. This three credit hour course consists of two hours of lecture/discussion and five hours of clinical/lab per week.

547PM Adv Health Assessment & Clinical Reasoning for Post-MSN Students (2). This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, development and spirtual assessment of individuals. The post-MSN student will build on previous advanced assessment skills, and content with emphasis on adding advanced physical assessment skills, lab work interpretation, validation, documentation and analysis of assessment findings appropriate to their desired role area. Students will meet the same outcome standards of the track in which they are currently enrolled. This course consists of 1.5 hrs of lecture/discussion and .5 hours of clinical/lab credit (40 minimum clinical hours and approval of faculty. Prerequisites: Advanced Health Assessment and Clinical Reasoning (or equivalent) or consent of instructor AND physical exam demonstration & write up (SOAP).

547W Hlth Assessment and Clncal Reasoning for Advnced Nursing Practice (3). This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of individuals. The course builds on basic health assessment skills and emphasizes advanced assessment skills, lab work interpretation, validation, documentation and analysis of assessment findings. This course consists of 2 hours of lecture/discussion and 1 hour of clinical/lab credit. Prerequisites: N401 (or equivalent) and consent of instructor/ videotape and physical exam write-up.

548 Advanced Pathophysiology (3). Advanced pathophysiology is the study of the alterations of normal physiological functioning in cellular, tissue, organ and organ systems. These alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on clients across the life-span. Advanced pathophysiology deals with both generalized processes and major organ system dysfunctions. This course consists of three hours of lecture/discussion per week.

548C Advanced Pediatric Pathophysiology (3). In this course, embryology of the major organ systems, as well as specific physiologic and pathophysiologic processes relevant to the child from birth through age 18 will be studied. This course focuses on the implications for advanced nursing practice that result from alterations of normal physiologic functioning in cellular, tissue, and organ systems. Emphasis is placed on the relationship between pathophysiology, decision-making, and standards of advanced nursing practice. Prerequisite: Admission to the Master of Science in Nursing or permission of the instructor. Offered: Fall 2001

548N Physiology/Pathophysiology of the Neonate (3). Concepts of embryology, neonatal physiology and pathophysiology are used to provide an in-depth study of normal functioning and alteration of normal physiological functioning in cellular, tissue, organ, and organ systems. Alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on neonates. Both generalized processes and major system dysfunctions are addressed. This three credit hours course consists of three hours of lecture and discussion each week. Prerequisites: Admission to the Neonatal Nurse Practitioner Track/Master of Science in Nursing or consent of the instructor **549 Pharmacology for Advanced Nursing Practice (3)**. This is a course in clinical pharmacotherapeutics that builds on prior knowledge of drug classification, actions, interactions and adverse drug reactions. The major focus of the course is the pharmacotherapeutic use of medications for primary health care management by advanced practice nurses. Emphasis is placed on the clinical critical thinking process used to prescribe drugs in the management of specific illnesses. The Missouri laws for advanced practice nurse prescriptive authority will be addressed. Core concepts include pharmacodynamics, pharmacokinetics, pharmacotherapeutics, health-related information, medication compliance and issues that pertain to the prescribing of medications in advanced nursing practice. This course consists of three hours of lecture/discussion/in-class clinical module work per week. Prerequisite: N548 Advanced Pathophysiology, Admission to the Master of Science in Nursing or permission of the instructor.

549C Pediatric Pharmacology for Advanced Nursing Practice (3). This is a course in clinical pharmacotherapeutics that builds on prior knowledge of drug classifications, actions, interactions and adverse drug reactions. The major focus of the course is the pharmacotherapeutic use of medicatins for primary health care management of children from birth to eighteen years of age by advanced practice nurses. Emphasis is placed on the clinical critical thinking process used to prescribe drugs in the management of specific illnesses. The Missouri laws for advanced practice nurse prescriptive authority will be addressed. Core concepts include pharmacodynamics, pharmacokinetics, pharmacotherapeutics, health-related information, medication compliance and issues that pertain to the prescribing of medications in advanced nursing practice. Prerequisite: N548 Advanced Pathophysiology

549N Pharmacology for the Neonate (3). Pharmacological agents used in the management of neonates are discussed. Pharmacologic principles are reviewed and applied to the use of drugs in the Level II or III NICU. The clinical use of drugs in the management of specific illnesses of the neonate are explored. In addition, legal considerations for the Advanced Practice Nurse are stressed. This three hour credit course consists of three hours of lecture/discussion per week.

550 Theoretical Foundations in Nursing (3). This course focuses on critical analysis of theory and the utilization of various levels of nursing and nursing related theories as a base for nursing at the graduate level. It further examines the inter-relationship of theory, research and practice in the development of the scientific body of nursing knowledge. Methods by which knowledge is gained and validated will be analyzed. Students will synthesize several different theories from which to form the basis of their practice. Relationships of theory, practice and research will be discussed. Prerequisite: Admission to the School of Nursing

555 Research Methodology (3). This course is designed to provide the student with research knowledge and skills necessary for the master's prepared nurse. These include the fundamentals of research methods in nursing, as well as the terminology necessary to interpret research findings. Principles and techniques common to research are applied. This course consists of lecture/discussion each week. Prerequisites/Co-requisite N550 Theoretical Foundations in Nursing & an upper division statistics course

556 Program Evaluation (3). This survey course is designed to introduce students to the philosophy, theory, and methodology of program evaluation. The end point of this course is that graduate students will be able to design, implement, and evaluate research, education and/or social programs within the context of their primary focus of study (i.e. clinical or role).

557 Qualitative Methods in Nursing Research (3). This course is designed to provide the student with the skills necessary to the understanding and conduct of qualitative research. Various methods, including ethnographic, phenomenologic, historic, grounded theory and aesthetic inquiry are presented and discussed. Emphasis is placed upon the appropriateness of each method for different research problems. This course consists of three hours of lecture/discussion per week. Prerequisites/requisites: Nursing 550 and 555.

558 Research Design (3). This course is designed to provide the student with experience in the development of a research proposal. Research skills acquired in previous courses will be synthesized to produce the componets of a proposal. Prerequisite: N555 Offered: Every Fall

564F Primary Health Care Nursing of Families II (4). This course is designed to examine the concepts and develop the skills essential to provide nursing care to individuals and families. The course focuses on common acute illnesses and enables the student to develop a practice base for clinical decision-making in the assessment and management of health care for individuals and families. Emphasis is given to those health issues most commonly encountered by the family nurse practitioner. A research- and theory-based approach to nursing interventions is used. Core content includes differential diagnosis, therapeutic management, secondary prevention, and patient education. This course consists of 2 credit hours of lecture/discussion and 150 hours (2 credit hours) of clinical laboratory. Prerequisites: N515, N526, N548 And N547F; Corequisite: N549

564N Neonatal Nursing I (3). This is the first of two courses that integrates the physiologic, pharmacologic, and assessment skills and principles in determining appropriate care of the ill neonate. Current research and evidenced-based practices are used as the course framework. The effects of critical conditions on the growth and development of the neonate, including subsequent chronic health problems as well as the short and long term consequences to the child's family are emphasized. The use of specific interventions and diagnostic procedures are demonstrated and applied in laboratory/clinical settings during forty hours of required clinical activities. Prerequisites: Nursing 549N.

564NM Primary Health Care of Women Nurse Midwife Seminar (1). This course is designed to provide guided study of selected topics and/or areas of practice in midwifery, patient care and the health care system. Independent study and seminar discussion format will be used to allow students the opportunity to develop in-depth knowledge in selected topics. Prerequisites: Coreq. N564PW Primary Care of Women and permission of faculty.

564NP Adult Nurse Practitioner Health Care Nursing II (4). This course is designed to examine the concepts and develop the skills essential to prepare adult nurse practitioner (NP) students to provide advanced nursing care to adults. The focus of the advanced nursing care to those health issues commonly encountered by adult NPs. Students will be expected to apply cumulative knowledge acquired from previous graduate courses. The course enables students to develop a research and theory based practice for clinical decision-making in the assessment and management of health care for adults. Core Content: differential diagnosis, theories - stress/adaptation theories and crisis, and advanced nursing skills. Prerequisites: N515,526,547,548 & 550. Corequisite: N549,555

564NS Adult Clinical Nurse Specialist Health Care Nursing I (4). This course is designed to examine the concepts and develop the skills essential to prepare adult nurse specialist (CNS) students to provide advanced nursing care to adults. The focus of the advanced nursing care to those health issues commonly encountered by adult CNSs. Students will be expected to apply cumulative knowledge acquired from previous graduate courses. The course enables students to develop a research and theory based practice for clinical decision-making in the assessment and management of health care for adults. Core content: differential diagnosis, theories - stress/adaptation theories and crisis, and advanced nursing skills. This course consists of two credit hours of lecture/discussion and two credit hours of clinical experience. The two credit hours of clinical experience consist of 150 hrs. Clinical practice and clinical seminar comprise the clinical experience. Prerequisites: Nursing 515,526,547,548 and 550. Corequisites: Nursing 549 and 555.

564PC Primary Care of Children (4). This course will focus on the application of the nursing process in the therapeutic management of common health problems encountered by nurse practitioners in the ambulatory health care setting. The student will apply knowledge and skills from advanced assessment, pathophysiology, pharmacology, health promotion, theory and research to the care of infants, children and adolescents from a variety of cultural and ethnic backgrounds. Core concepts include differential diagnosis, therapeutic management including symptom and usual treatment, adherence, secondary prevention, and patient education. Content includes clinical management of well children and children with acute illnesses commonly encountered in ambulatory care settings. Prerequisities: N515SP, N526, N547C,N548, N550; Pre or Co-Requisities: N549C.

564PW Primary Health Care of Women (4). This course will focus on the etiology, symptomatology, diagnosis and management of gynecologic and non-gynecologic primary health care problems in women, throughout the lifespan. Emphasis will be placed on caring for women within a holistic framework and recognizing how the changing roles of women in today's society can effect their lives and their health status. Concepts, theories and research related to health promotion, health maintenance and restoration and the prevention of illness and injury of epidemiologically significant problems and potential problems will be addressed. Through clinical experiences, students will integrate concepts of wellness and health promotion, illness prevention, and collaboration, as well as nursing and medical therapeutic modalities, to provide care to women in a comprehensive, interdisciplinary fashion. Core content: differential diagnosis; theories: stress/ adaption and crisis; therapeutic relationships; and advanced nursing skills. This course will consist of 2 credit hours of lecture/seminar plus 2 credit hours (150 clock hours for NP students) of clinical practice. Students in the Nurse Midwife program will be required to take the 1 credit hour course, Primary Health Care of Women Midwife Seminar, concurrently. Pre-and Co-requisites: Advanced Health Assessment (N547W) (pre); Advanced Pathophysiology (N548) (pre); Advanced Pharmacology (549) (co)

566F Primary Health Care Nursing of Families III (4). This course is designed to provide students with the opportunity to apply knowledge from previous family nurse practitioner courses to advanced primary care nursing of individuals and families across the life span. The focus of the course is on the application of the nursing process in the differentiation and therapeutic management of stable chronic health problems encountered by family nurse practitioners in the primary health care setting. Emphasis is on the integration

of advanced nursing concepts and pharmacokinetic principles in the care of individuals and families. Core content includes stress and coping, adaptation, pain management, and grief and loss. This course consists of 2 credit hours of lecture/discussion and 150 hours (2 credit hours) of clinical laboratory. Prerequisites: N549 and N564F

566N Neonatal Nursing II (3). This is the second of two courses that integrates the physiologic, pharmacologic, and assessment skills and principles in determining appropriate care of the ill neonate. Current research and evidenced-based practices are used as the course framework. The effects of critical conditions on the growth and development of the neonate, including subsequent chronic health problems as well as the short and long term consequences to the child's family are emphasized. The use of specific interventions and diagnostic procedures are demonstrated and applied in laboratory/clinical settings during forty hours of required clinical activities. Prerequisite: Nursing 564.

566NP Adult Nurse Practitioner Health Care Nursing III (4). This course is designed to prepare adult clinical nurse practitioner (NP) students in the care and management of adults populations with chronic health problems. The focus of the course is on the differentiation and therapeutic management of chronic health problems encountered by adult NPs in various health care settings. Emphasis is given to those health issues commonly encountered by adult NPs. The course enables students develop a research and theory based practice for disease state management of health care for adults. Core content: theories- grief and loss, chronicity, and pain; advanced nursing skills. This course consists of 2 credit hours of clinical experience. The 2 credit hours of clinical experience consists of 150 hours. Clinical practice and clinical seminar comprise the clinical experience.

566NS Adult Clinical Nurse Specialist Health Care Nursing II (4). This course is designed to prepare adult clinical nurse specialist (CNS) students in the care and management of adults populations with chronic health problems. The focus of the course is on the differentiation and therapeutic management of chronic health problems encountered by adult CNSs in various health care settings. Emphasis is given to those health issues commonly encountered by adult CNPs. The course enables students develop a research and theory based practice for disease state management of health care for adults. Core content: theories- grief and loss, chronicity, and pain; advanced nursing skills. This course consists of two credit hours of clinical experience. The two credit hours of clinical experience consists of 150 hours. Clinical practice and clinical seminar comprise the clinical experience.

566PC Chronic Child Health Care (4). This course is designed to provide students with the opportunity to apply knowledge and skill from advanced assessment, pathophysiology, pharmacology, health promotion, research and theory to advanced nursing care of patients and families experiencing complex or chronic health problems. Emphasis is placed on using models and theories that guide advanced practice and on determining the current research base on nursing assessment and management in several specific areas of knowledge. The organizing framework for this course is case management of chronic health states. Students will apply several theoretical models to acute and chronic health states of children at various developmental stages representing various socioeconomic and cultural groups, either in primary or specialized care settings. Core concepts are stress and coping, adaptation, pain management, grief and loss, nutritional support, ethical decision-making, case management, and symptom management. This course will consist of 2 credit hours of lecture/seminar plus 150 hours (2 credit hours) of clinical practice. Prerequisite: N564PC.

566W Care of the Childbearing Woman (4). This course will focus on norman adaption and pathologic alterations throughtout the childbearing period. Emphasis is placed on caring for women and families from preconception through the puerperium. Concepts, theories and research related to the biopsychosocial and cultural aspects of childbearing will be addressed. Utilization of models and theories that guide advanced nursing practice will be the organizing framework for the course. Core concepts include adaptation, stress and coping, grief and loss, pain and symptoms management. This course will consist of 2 credit hours of lecture/seminar plus 2 credit hours of clinical practice. Prerequisite: N564PW-Primary Health Care of Women or Equivalent

572 Advanced Nursing Practice: Synthesis Practicum (3). This course is a concentrated, experiential opportunity to function in an advanced practice nursing role of clinical nurse specialist, nurse practitioner, nurse educator and nurse administrator, integrating clinical and functional role activities within a chosen setting. Core concepts include advanced nursing practice, functional role responsibilities, standards of care, and activities with emphasis on their relationship to client outcomes. This course consists of periodic group conferences for all students and 225 hours of clinical for clinical nurse specialist and nurse practitioners or 135 hours of clinical for nurse educators and nurse administrators. Prerequisites: All required courses except N598/599 and electives.

572II Preceptorship II (4). This is the second of two preceptorship experiences which can be taken concurrently or in consecutive semesters. This preceptorship course will be a minimum of 300 clinical hours. Opportunities to

build upon knowledge and skills gained during Preceptorship I regarding the advanced therapeutic management of high risk neonates are provided. Emphasis is placed on therapeutic measures within a conceptual framework or model and applying findings from research relevant to comprehensive care of neonates. The client system will be the neonate and family. Prerequisites: Nursing 572I.

572NA Advanced Nursing Practice: Synthesis Practicum (3). This course is designed to afford the student a concentrated, experiential opportunity to function in the role she/he has chosen to pursue professionally. This course consists of nine hours of clinical experience per week and a conference every other week. Prerequisites: All courses except N598/599.

572NE Advanced Nursing Practice: Synthesis Practicum (3). This course is designed to afford the student a concentrated, experiential opportunity to function in the role she/he has chosen to pursue professionally. This course consists of nine hours of clinical experience per week and a group conference every other week. Prerequisites: All courses except N598/599.

572NI Preceptorship I (4). This is the first of two preceptorship experiences which can be taken concurrently or in consecutive semesters. This preceptorship course will be a minimum of 300 clinical hours. Opportunities to apply knowledge and skills from advanced nursing roles, theory, research, and neonatal clinical courses to the advanced therapeutic management of high risk neonates are provided. Emphasis is placed on therapeutic measure within a conceptual framework or model and applying findings from research relevant to comprehensive care of neonates. The client system will be the neonate and family. Prerequisites: Nursing 564N and 566N.

587 Research Utilization in Nursing (3). This course will prepare nurses to implement a research utilization model to validate practice. The theoretical basis for research utilization and practical instances of its application in nursing will be examined. Opportunities will be provided to develop a research utilization plan to address a clinical area of practice. Prerequisites: N545, N555

597A Independent Study in Nursing/Patient Care-Elective (1-6). Guided study of selected topics and/or areas in nursing and/or patient care. Prerequisites: Nursing 550 and permission of faculty.

597B Independent Study in Nursing/Patient Care-Equivalent (1-6). Guided study of selected topics and/or areas in nursing and/or patient care. Prerequisites: Nursing 550 and permission of faculty.

597CD Independent Study in Nursing/Patient Care-Elective (1-6). Guided study of selected topics and/or areas in nursing and/or patient care. Prerequisites: Nursing 550 and permission of faculty.

597D Independent Study in Nursing (1-6).

597RA Independent Study in Nursing (1-6).

598 Directed Research (1-6). Individual research project for students to utilize beginning research skills in designing and conducting independent studies under the direction of the faculty. Prerequisites: Nursing 550, 555 and permission of faculty.

599 Research Thesis (1-9). Individual study under the direction of a member of the faculty leading to the preparation and oral defense of a thesis. Prerequisites: Nursing 550, 555 and permission of faculty.

600 Doctoral Seminar (1). This one credit hour four semester seminar course is designed to assist doctoral students in the process of socialization into a community of scholars. In a colloquium structure, students are exposed to and respond to current issues in nursing research. These issues are presented as discussion topics and in the context of responding to their colleague- scholars' research activities and issues. Content may include such issues and concerns as theoretical models for research and education; collaboration and interdisciplinary research efforts; and the appraisal, interpretation and dissemination of research findings. Additional topics may include the processes undertaken in the submission of research proposals (e.g. IRB review, grant writing, peer review, etc.). Prerequisites: Admission to the Doctor of Philosophy in Nursing program.

605 Philosophy of Science In Nursing (3). An overview of philosophy and the history of science are briefly reviewed as the foundation for the rise of modern science. Issues specific to scientific knowledge are discussed, including how scientific knowledge is achieved, supported, and changed. The nature of science will then be addressed through the dialogue of competing philosophical perspectives, such as logical positivism, historicism and poststructuralism. Finally, contemporary nursing science, and its future are explored. Context topics include philosophic inquiry vs. scientific inquiry; the nature of gender, culture and values in science. Prerequisite: Admission to the Doctor of Philosophy in Nursing Program or permission of the instructor.

608 Theory Development in Nursing I (3). This course is taken concurrently with philosophy of science. In exploring the historical development of theory in nursing, students will discuss how changes and shifts occur in metaparadigms, paradigms, worldviews, and bodies of knowledge. Nursing's

grand theories will be examined in historical context. Strategies for developing nursing knowledge will be explored. Emphasis is placed on concept analysis, synthesis, and derivation. The process for transforming defining criteria into empirical indicators will be explored. Prerequisites/Corequisites: Admission into the PhD in Nursing program.

610 Theory Development in Nursing II (3). Building on the knowledge of the first theory course, students will continue to explore the process of theory development. Focus will be on the development strategies of statement and theory analysis, synthesis, and derivation. Models, frameworks and theories will be critically evaluated using a variety of criteria. Strategies for theory development will be analyzed in depth and implemented by students in the creation of their own conceptual framework. Prerequisities: N608 Theory Development in Nursing I or permission of instructor.

668 Quantitative Research (3). Quantitative reserach methods used to build nursing's body of knowledge are explored. Experimental, quasi-experimental, and correlational designs and clinical trials are analyzed. Emphasis is placed on design, data generation, analysis, and dissemination of findings. Issues pertaining to the use of quantitative methods will also be explored. Prerequistes: Psychology 516 (or equivalent) N610 Theory Development in Nursing II, or permission of instructor.

670 Qualitative Research Methods (3). Qualitative research methods used to build nursing's body of knowledge are explored in this seminar course. Emphasis is placed on design, data generation and analysis, and dissemination of findings. Issues regarding qualitative research are identified and analyzed. Prerequisite: Admission to the Doctor of Philosophy in Nursing program or permission of instructor.

676 Research Practicum (3-6). The research practicum is a structured educational activity that is preparatory to formal initiation of the dissertation process and typically takes place as the last course. The focus of the activity is on refining the skills required by an individual student to conduct the dissertation research. The precise structure of and the credit awarded for the research practicum is determined by the student's program committee. Prerequisites: Permission of the student's program committee.

694 Directed Readings (1-3). Intensive readings in an area selected by the graduate student in consultation with the instructor. By the end of the semester, the student will be prepared to: 1. Analyze selected readings in relation to the context of the dissertation. 2. Integrate selected readings into the development of the dissertation.

699 Dissertation Research (1-12). Individual directed research leading to preparation and completion of doctoral dissertation.

899 Required Graduate Enrollment (1).

School of Pharmacy

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University of Missouri-Kansas City School of Pharmacy 113 Katz Pharmacy Building 5100 Rockhill Road Kansas City, MO 64110-2499

Dean:

Robert W. Piepho Associate Dean: Wayne M. Brown Assistant Dean: Mary L. Euler

General Information

History

Originally organized in 1885 as the Pharmaceutical Department of the University of Kansas City, the school was reorganized and reincorporated in 1898 as the Kansas City College of Pharmacy and Natural Science. In 1943, this forerunner of the present school joined the University of Kansas City as its third professional school.

When the University of Kansas City was incorporated into the University of Missouri System in 1963, the School of Pharmacy became the only state-supported pharmacy school in Missouri. In October 1985, the school observed its centennial celebration, commemorating 100 years of progress in pharmaceutical education, research and service.

The School of Pharmacy is a member of the American Association of Colleges of Pharmacy (AACP). The doctor of pharmacy program is accredited by the Accreditation Council for Pharmacy Education (ACPE). The most recent accreditation review was in 2003, when full accreditation was continued. The next on-site accreditation review will be during the 2009-10 academic year. Anyone interested can contact ACPE at http://www.acpe-accredit.org for more information.

Degrees Offered

The School of Pharmacy offers programs leading to the advanced professional degree of doctor of pharmacy and the undergraduate-level bachelor of science in pharmaceutical science. Graduate-level degrees include the master of science in pharmaceutical science. Emphasis areas available in the master's degree program are pharmaceutics (including pharmaceutical technology and pharmacokinetics), pharmaceutical chemistry (including medicinal chemistry), pharmacology and toxicology. The School of Pharmacy participates in the Interdisciplinary Ph.D. program with emphasis areas in pharmaceutical science and pharmacology.

Graduate Programs

Degrees Offered

The School of Pharmacy offers the master of science in pharmaceutical science and participates in the Interdisciplinary Ph.D. degree program in the School of Graduate Studies. Areas of concentration available at the master's level include pharmaceutics, pharmaceutical technology, biopharmaceutics/pharmacokinetics, medicinal chemistry, pharmacology and toxicology. The disciplines of pharmaceutical science (which incorporates pharmaceutics, pharmaceutical chemistry and pharmacokinetics) and pharmacology are eligible for I.Ph.D. study.

The M.S. degree incorporates research, thesis and core curricular requirements. Admission to graduate study in the School of Pharmacy represents a judgment of the faculty that a student has the potential to successfully pursue a graduate degree. It does not provide a guarantee.

Students must adhere to all stipulations of the University for the degrees sought. Nothing in this description shall be construed to be in conflict with policies of the University or the School of Graduate Studies; however, the School of Pharmacy reserves the right to set more exacting standards for admission and retention.

Admission Requirements

Master of Science in Pharmaceutical Science

All applications to master's programs in the School of Pharmacy must be made through the UMKC Admissions Office. An applicant must meet the general requirements of the University to be considered by the School of Pharmacy.

Applications are reviewed by the appropriate division and must be approved by the graduate programs committee of the school, composed of professors who have appointments to the University graduate or doctoral faculty, and by the dean of the School of Pharmacy.

Admission to the graduate programs in the School of Pharmacy is contingent on the ability of the graduate faculty to accept additional graduate students and the availability of space and funding in the proposed area of emphasis.

Thus, worthy candidates may not be accepted due to a lack of a match in students' interests to faculty availability and other considerations.

Requirements for admission to the master of science program in the School of Pharmacy include:

- A professional degree in pharmacy or a baccalaureate degree in a related-science field;
- An aggregate minimum undergraduate GPA of 3.0 for students graded on a 4.0 basis, a first-class degree for students graded on the British system or equivalent undergraduate achievement for others. (A prospective faculty adviser may require more stringent standards in the emphasis area and may recommend acceptance based on consideration of other factors.) For those students whose emphasis area is pharmacology, a minimum 3.5 GPA is required on all post-baccalaureate work;
- Submission of three letters of reference bearing on the academic and research potential of the applicant from individuals who have in-depth knowledge of evaluating the applicant's ability and potential for graduate level study;
- Submission of scores obtained in the Graduate Record Examination (GRE). A minimum score of 1800 is required;
- For students whose primary language is not English, scores from the Test of English as a Foreign Language (TOEFL) must be submitted. A minimum TOEFL score of 580 is required;
- Foreign students must meet financial independence criteria established by the University; and
- Students whose native language is not English must follow the UMKC English Proficiency Requirements for International Students.

Although new students pursuing the pharmaceutical science emphasis are accepted in all terms, because of course sequencing it is recommended that students enter in the fall term. The deadline for making application to the M.S. program is March 1 for the fall term and Oct. 1 for application to the winter term. Due to course sequencing, new pharmacology emphasis students will preferably be accepted in the fall term. To have credentials included in the review process, applicants should submit GRE scores and all other necessary supporting documentation no later than May 15 (domestic applicants) or March 15 (international applicants) in the year in which admission is sought. Please note: The Division of Pharmacology is not accepting applications for the master of science program with pharmacology as an emphasis.

Part-Time Graduate Students

Once all admission requirements have been satisfied, students admitted to the master of science in pharmaceutical science emphasis area or doctoral students whose coordinating unit is pharmaceutical science may enroll part-time. Scientists who are employed in the Kansas City area may complete graduate study on a part-time basis by electing up to 6 credit hours each semester. However, the student must satisfy residency requirements and time limit restrictions of the School of Graduate Studies and the School (or its disciplines) before a degree is conferred. Research toward the thesis or dissertation must be independent of the projects ongoing at the student's place of employment. Research must be conducted in School of Pharmacy laboratories during at least two weekdays and one weekend day each week for one year.

Students whose coordinating unit or emphasis area is pharmacology should contact the division chair for separate regulations in this area.

Doctor of Philosophy

Ph.D. programs at UMKC are interdisciplinary. Students desiring to study at the doctoral level in pharmaceutical science or pharmacology must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific admission requirements may be found in the School of Graduate Studies section of this catalog.

Students pursuing Interdisciplinary Ph.D. study, who have selected pharmaceutical science or pharmacology as one of their disciplines, should consult the School of Graduate Studies section of this catalog for degree requirements and other academic regulations applicable to their degree programs.

Career Applications

The M.S. degree offers advanced education in pharmaceutical science to students with undergraduate degrees in pharmacy or baccalaureate degrees in other fields such as chemistry, chemical engineering or biology. An M.S. degree is often a requisite for management positions in industrial pharmaceuticals production, quality assurance, regulatory affairs and other areas. It is sometimes desired as a milestone for full-time graduate students who are pursuing Interdisciplinary Ph.D. degrees, but the M.S. is not a prerequisite for the Ph.D. degree. Full-time students applying for admission to the graduate programs in the School of Pharmacy are urged to apply to the Interdisciplinary Ph.D. program.

The Ph.D. degree is the highest academic degree offered in any American university. It is a research degree. Merely attaining high grades in didactic coursework and passing examinations is insufficient demonstration of merit for this degree. Obtaining the Ph.D. degree requires demonstration of the highest order of scholarship; diligent and inventive pursuit of a research program; and defense of a dissertation based upon original research.

The Ph.D. is usually a requirement for obtaining appointment to university faculties or to senior-level appointments in research and development in pharmaceutical and related industries, research institutes and in government.

School Activities

Pharmaceutical Science Graduate Student Association (PSGSA)

Formed in 1981, this organization seeks to provide a forum for the exchange of ideas among graduate students in pharmaceutical science and to enhance appreciation of research activities among undergraduate pharmacy students. Each year PSGSA sponsors a picnic for all new and returning graduate students. They also arrange hospitality and publicity for graduate seminar programs and the annual School of Pharmacy Research Day.

Rho Chi Pharmaceutical Honor Society

Graduate students in pharmaceutical science who meet the society's general academic criteria may be recommended for membership after completion of their first year of graduate study.

Seminar Requirement

There are two emphasis-area-specific seminar sections. Pharmacy 580A is for students in pharmaceutical science and Pharmacy 580C is for students with an emphasis in pharmacology or toxicology.

Attendance and participation in graduate seminars is required of all graduate students in the School of Pharmacy throughout their tenure in the program regardless of enrollment. Schedules and requirements vary in these sections, but at a minimum, each student usually presents one seminar during each academic year.

Faculty Advisers

All pharmacy graduate students are assigned interim faculty advisers as stated in the letter of admission. By the end of the first year, each student must have selected a permanent adviser.

For students (master's and doctoral) whose emphasis area is pharmaceutical science, if the permanent adviser chosen is not the same as the interim adviser, the student must confirm acceptance in writing by the desired permanent adviser. If a student wishes to change permanent advisers, a meeting will be held with the student and the two advisers to discuss the change. This meeting will be mediated by the division chair. If the division chair is one of the two advisers, a third party will mediate.

If the student changes to a faculty member outside the Division of Pharmaceutical Sciences, then such student will immediately lose any financial support from the Division of Pharmaceutical Science's resources. If the student changes to another faculty member in the Division of Pharmaceutical Science, then any support from the division or school (e.g., GTA) resources will transfer with the student during the first year of graduate studies. Resources from individual professors are at the discretion of such professors.

The adviser from whom the student is transferring has the rights to all previous projects worked on by the student and all research ideas, grant proposals, etc., originating from such work. That adviser must grant permission in writing for the student to use any such material for meeting presentation, publication, patent, thesis or dissertation.

Scholarships, Awards and Financial Assistance

Teaching and Research Assistantships

School of Pharmacy assistantships are awarded on a competitive basis. Awards are generally appointments for 10 to 20 hours per week. Assistants are required to contribute to the academic program of the School of Pharmacy through laboratory assistance or in other service of academic character. Information on the current level of stipends and application for assistantships may be obtained from the Student Services Office of the School of Pharmacy. Persons receiving assistantships are expected to enroll in a minimum of 6 credit hours per term. In addition to their stipends, teaching and research assistants are eligible for a waiver of nonresident fees.

Thomas D. Ross Memorial Graduate Scholarship

An annual cash award established in memory of Thomas D. Ross is presented to recognize the superior pursuits of a graduate student in pharmacology. Selection preference will be given to the student who is a U.S. citizen, who is a Missouri resident and who is married.

Richard D. Johnson Graduate Pharmaceutical Sciences Award

Eligible applicants must be a UMKC Pharm.D. graduate entering the Interdisciplinary Ph.D. program immediately after graduation with a high cumulative GPA. The \$2,500 stipend is awarded during the first semester of the doctoral program. Financial need is not considered. Contact the Pharmacy Student Services Office for application procedures.

Robert C. Lanman Graduate Pharmacology Scholarship Pharmacology-emphasis-area students may apply for one of two scholarship eligibility options. The first option requires the M.S. or Ph.D. pharmacology applicant to possess a minimum cumulative GPA of 3.0 and proof of financial need. The applicant must be fully admitted to the degree program and have successfully completed no less than two semesters of full-time coursework. The second option is for senior-level Interdisciplinary Ph.D. students with pharmacology as their emphasis area. The applicant must possess a minimum cumulative grade-point average of 3.0 and have successfully completed written and oral comprehensive exams. With this option, funds are to be used to offset the cost of dissertation preparation and/or to attend a scientific meeting at which an abstract of the dissertation research will be presented as first author. The recipient is selected by the Division of Pharmacology faculty and the school's scholarship and financial aid committee.

Additional Sources of Support

The American Foundation for Pharmaceutical Education (AFPE) provides fellowships to aid graduate students who have completed at least one year in a school of pharmacy. Stipends provide for educational fees, books and partial personal needs. Applications are generally due in March and students must request application forms directly from AFPE. A statement of recommendation from the dean is required.

The United States Pharmacopeial (USP) Convention offers a maximum of eight annual fellowships of up to \$12,000 to doctoral candidates for research projects related to developing or improving standards for drugs or drug products. Candidates must be endorsed by faculty serving on the USP advisory panel.

Please refer to the School of Graduate Studies section of this catalog for other potential sources of financial support.

Master of Science

Degree Requirements

Prior to full admission in the School of Pharmacy, graduate students in the pharmaceutical science or pharmacology and toxicology areas will have completed coursework in calculus, organic chemistry, physical chemistry, biochemistry, microbiology, human anatomy and physiology in University departments and schools outside the School of Pharmacy, when these courses are appropriate to their interests. They also may elect advanced courses related to their areas of interest. Because many courses have prerequisites, the sequence of emphasis area courses and elective courses is determined by the academic background of each student and their research interests and requires the concurrence of the faculty adviser. Graduate students whose emphasis area is pharmaceutical science will be given a placement examination, administered by division faculty, to assess undergraduate preparation for graduate-level study. Deficiencies existing on admission must be discussed with the interim faculty adviser during the first semester of graduate work. Course equivalency is determined by the pharmaceutical science discipline faculty on a case by case basis. Students are required to pass the discipline placement exams before appearing for the comprehensive exams administered by the Supervisory Committee.

Minimum Requirements for M.S. Degree

- 1. The M.S. degree requires completion of a minimum of 32 credit hours of graduate study including 2 credit hours of Pharmacy Seminar, 3 credit hours of statistics and 6 credit hours of Pharmacy 599 Research and Thesis. Although students are required to enroll and successfully complete only 2 credit hours of Pharmacy Seminar, pharmacy graduate students (degree- and non-degree-seeking) are required to participate and attend all scheduled sessions of Pharmacy Seminar each semester.
- 2. Before full acceptance to a degree-seeking program, students will be selected by a faculty adviser who must be a member of the University graduate faculty. The faculty adviser and student will plan the degree program of study, contingent on approval by the supervisory committee and the graduate programs committee of the school. The faculty adviser and two additional graduate faculty members serve as the M.S. supervisory committee.

Emphasis Area Requirements

Following are the emphasis area requirements for the M.S. degree in pharmaceutical science.

Courses	Hours
Pharmaceutical Science Courses	10
Other Coursework	11
Statistics	3
Pharm 580A Seminar	2
Pharm 599A or 599B Research and Thesis	6

Other graduate-level courses offered by the division or coursework in the Division of Pharmacology, Chemistry Department or the School of Biological Sciences may be taken with prior approval.

Following are the requirements for the M.S. degree in pharmaceutical science with emphasis in pharmacology.

Pharm 509 Basic Toxicology	3
Pharm 519 Pharmacology I	4
Pharm 520 Pharmacology II	5
Pharm 615 Methods in Pharmacology	
and Toxicology	3
Pharm 580C Seminar	*2
Pharm 599C Research and Thesis	6
Educ 505 Statistical Methods I	3

A minimum of 6 credit hours must be chosen from the following optional courses:

Pharm 521 Advanced Organic Medicinal Chemistry	3
Pharm 531 Physical Pharmacy Equilibria	3
Pharm 515 Drug Absorption, Distribution,	
Metabolism and Excretion	3
Pharm 590AB Receptor Pharmacology and	
Signal Transduction	3

*1 credit hour of Pharmacy 580C must be successfully completed in each academic year enrolled beginning with the second year. Attendance at all seminars is mandatory regardless of enrollment. Other graduate-level courses offered by the division or coursework in the Division of Pharmaceutical Science, Department of Chemistry or School of Biological Sciences may be taken with prior approval.

Students with professional degrees in pharmacy will be required to take other advanced graduate-level courses that are offered.

M.S. Supervisory Committee and Program of Study This committee comprises the faculty adviser and two other graduate faculty members recommended to the School of Graduate Studies by the student and faculty adviser. The faculty adviser, who serves as chairperson of the committee, and a majority of the members of a master's student supervisory committee must be full members of the graduate faculty. Therefore, no more than one member of a master's supervisory committee may be an adjunct graduate faculty member. A majority of the faculty making up the supervisory committee must be from the student's emphasis area. An adjunct member may not be counted toward the mandated representation from the emphasis area discipline. The supervisory committee must approve the plan of study and thesis research protocol submitted by the student.

Graduate credit for courses requires that the courses be at least 300- or 400-level and that a grade of B or better be obtained. A grade lower than B in a required 500- or 600-level course may be allowed to stand; however, the student's adviser and supervisory committee may require that the course be repeated.

Students enroll in courses with the approval of their faculty advisers. Within the first 12 hours of degree-seeking graduate study, the student has advanced to the point where a supervisory committee is appointed and the planned program of study is developed. The program of study must receive the approval of the supervisory committee and graduate programs committee.

A majority of the coursework applicable to any graduate degree at UMKC must be completed at UMKC. See the General Graduate Academic Regulations and Information section of this catalog for more information.

Comprehensive Examination for M.S. Candidates in Pharmaceutical Science

Students are required to pass written and oral comprehensive examinations on questions provided by the supervisory committee during the semester before the degree is to be conferred. However, the oral comprehensive exam may be incorporated with the thesis defense or final project. Generally, the written examination covers knowledge which should have been obtained in performance of coursework. The oral examination encompasses knowledge which should have been obtained in performance of research, as well as coursework.

The first comprehensive examination is written. Questions are submitted by each member of the supervisory committee, as guided by the chairperson. For students with an emphasis in pharmaceutical science, the division faculty, in conjunction with the supervisory committee, will submit questions for comprehensive exams. Once the written examination has been taken, the supervisory committee must convene to determine whether the student has passed. In the event that this examination is failed, the student may retake the examination within the next semester, but no sooner than 10 weeks after the first attempt. Failure to pass the second written examination results in dropping the student from the program.

On passing the written examination, the student and his or her major adviser will schedule an oral comprehensive examination at a time mutually agreeable to the supervisory committee. The general requirements of the oral comprehensive examination will be presented to the student in writing at least six weeks in advance of the date of the examination. A determination of pass or fail on the oral examination will be made by vote of the committee after the oral examination has been completed. In the event the oral examination is failed, the student will be given a second oral examination to take place no later than the semester following the failed examination. Failure to pass the oral examination a second time will mean the candidate is dropped from the program.

More than one negative vote on an M.S. oral or written comprehensive exam constitutes failure of the examination.

A minimum of three members of the supervisory committee must be present at the oral examination for the examination to be held. If the examination is canceled for lack of the required number of examiners, it should be scheduled again as soon as possible.

M.S. candidates whose emphasis is pharmacology are not required to take written or oral comprehensive exams. However, the supervisory committee may examine a candidate's basic pharmacology knowledge at the time of the final oral thesis defense.

Thesis Defense

The final requirement for conferral of the M.S. degree is defense of the thesis, where the supervisory committee is the examining body. The thesis must be submitted in complete typewritten form to the adviser and supervisory committee at least six weeks before the date the advanced degree is to be conferred. Please see the Thesis and Dissertation Preparation and Approval Process listed under the School of Graduate Studies section of this catalog for regulations pertaining to thesis preparation. The defense is conducted only after the thesis has been certified for acceptance by the dean of the School of Graduate Studies and may not be administered when UMKC is not officially in session, nor on a weekend. The defense must be announced with an abstract at least two weeks in advance of the scheduled date of the defense.

The defense of the thesis is approved when a majority of the supervisory committee members recommend approval and sign the report of results form. Students must comply with all rules and regulations governing theses outlined under Minimum Academic Regulations Specific to Master's Degrees in the General Graduate Academic Regulations and Information section of this catalog.

Ph.D. Degree Requirements

Please see the School of Graduate Studies section of this catalog.

Requirements for Retention

A cumulative GPA of 3.0 (B) or better must be maintained during each semester of enrollment in all work applicable to a graduate degree.

If a student does not maintain a cumulative GPA of 3.0 (B), eligibility to continue graduate enrollment will be determined in accordance with the probation policies of the School of Graduate Studies. Please see the School of Graduate Studies Requirements for Retention section of this catalog. Recommendations from the School of Pharmacy will be based on evaluations by the student's supervisory committee and the school's graduate programs committee, which reviews the progress of all graduate students at the end of each semester. The student is allowed one semester to return to good academic standing.

In addition to the above requirements, master's students in pharmaceutical science with an emphasis in pharmacology who receive a grade below B in courses offered by the Division of Pharmacology will be required to repeat the course. A course may not be repeated more than once, and the repeated grade achieved must be a B or higher. A student with an emphasis in pharmacology who receives a grade of C in more than 6 credit hours or who receives a grade lower than C or NC is ineligible to continue the graduate program. A C grade achieved in courses approved and offered by the Division of Pharmacology must be repeated.

Requirements for M.S. Degree Conferral

In addition to completing the M.S. degree requirements listed in this section, students must adhere to all requirements for the graduate degree sought and related stipulations noted in the General Graduate Academic Regulations and Information section of this catalog.

Note: Program requirements and course descriptions are subject to change without notice after publication of this catalog. Pharmacy graduate students are encouraged to remain in contact with their major faculty adviser to stay apprised of program requirements in effect.

Non-Degree-Seeking Graduate-Level Students

The School of Pharmacy recognizes that area residents employed in the pharmaceutical industry and related organizations may not desire to pursue a graduate degree, but may wish to take an occasional graduate course to update their knowledge base. Persons with baccalaureate degrees in pharmacy, chemistry or biology who have completed the appropriate prerequisite coursework for the courses they wish to undertake may request classification as 6-G non-degree-seeking graduate students. No more than 12 credit hours may be taken under a 6-G classification. Enrollment in any School of Pharmacy course requires a completed UMKC application form and approval of the director of pharmacy student affairs.

Continuing Education Programs

The School of Pharmacy is making a significant contribution to members of the pharmaceutical profession and allied health professionals by providing continuing education in pharmacy for the improvement of professional competence as it relates to drug utilization in disease states. Area needs, as they are identified by the profession, are met through conferences, short courses, home-study courses and seminars. The School of Pharmacy has been accredited as a provider of continuing education by the Accreditation Council for Pharmacy Education. For detailed information on offerings and services available, contact the associate dean.

Pharmacy Courses

507 Basic Pharmacology (3). Basic pharmacological concepts and important classes of pharmacologic agents. Prerequisites: Human anatomy, physiology and biochemistry. Fall, each year.

509 Basic Toxicology (3). Principles of general toxicology and toxicology of industrial and household chemicals, agricultural agents, social poisons, and selected therapeutic agents. Prerequisites: Human Anatomy, Physiology, Biochemistry and PHARM 507 or 519. Offered: Fall, each year.

515 Drug Absorption, Distribution, Metabolism and Excretion (3). A course dealing with the absorption, physiologic distribution, metabolism and excretion of drugs and other organic compounds and factors which influence these events. Three hours lecture a week. Fall, odd year.

519 Pharmacology I (4). Pharmacology of medicinals with emphasis on basic concepts, the autonomic nervous system, and cardiovascular agents. Four hours lecture per week. Prerequisite: Human anatomy, physiology and biochemistry. Offered: Fall.

520 Pharmacology II (5). Pharmacology of medicinals with emphasis on chemotherapeutic agents, drugs acting on the renal system, and drugs for endocrine disorders. Four hours lecture per week. Prerequisite: PHARM. 519. Offered: Winter.

521 Advanced Organic Medicinal Chemistry (3). Chemistry, physiochemical properties, mechanism of action and structure-activity relationships of organic drug molecules. Fall, odd years.

527 Analytical Methods (3). A detailed study of the methods used to detect, identify, and quantitate drugs, small molecules, enzymes, proteins, and biological molecules. The statistical foundation, core concepts, and practical implementation of analytical methods are areas of emphasis. State-of-the-art instrumentation and recent technological developments are also presented, including biotechnology based methods such as proteomics methods and quantitative PCR. Prerequisites: Two hours of lecture and three hour demonstration/laboratory a week. Offered: Fall

531 Physical Pharmacy Equilibria (3). Advanced principles of aqueous solutions, acid-base equilibria, solubility and complexation. Mathematical solutions and state-of-the-art research applications. Three hours lecture a week. Prerequisite: B.S. in Pharmacy Permissions of instructor. Winter, even years.

533 Biopharmaceutics and Pharmacokinetics (4). Study of (1) the kinetics of absorption, distribution, and elimination of drugs and the relationship of kinetic parameters to dosage form, biological factors, and dosage regimen; (2) the development of various models for pharmacodynamic-pharmacokinetic correlations. Four hours lecture. Prerequisite: MATH 345 (Ordinary Differential Equations) or equivalent. Fall, even years.

550 Stability of Pharmaceuticals (3). The course provides instruction in the processes responsible for instability of pharmaceuticals. Course content includes, but is not limited to, instability due to light, oxygen, and metal ions; the effect of temperature on the rate of drug decomposition; the effect of dielectric constant and ionic strength on degradation; and physical and chemical instability of newer polypeptide drugs. In addition, practical strategies to prevent instability of the active compound and excipients used in pharmaceutical formulations is provided. Prerequisites: MATH Calculus (required) & Ordinary Differential Equations (recommended); Course Grade of "B" or better in both PHAR 202 and 203; Restriction: Consent of instructor Offered: Fall semester even-numbered year.

580A Seminar in Pharmaceutical Sciences (1). Enrollment and participation required of all graduate students in the School of Pharmacy during each semester of graduate study. One hour each week. This course is graded on a credit/ no credit basis. Offered: Fall and winter.

580C Seminar in Pharmacology/Toxicology (1). Enrollment and participation required of all graduate students in the School of Pharmacy during each semester of graduate study. Credit/no credit. One hour each week. Fall & winter.

590A Special Topics Pharmacy (1-3).

590B Special Topics Pharmaceutical Chemistry (1-3).

599A Research and Thesis Pharmacy (1-9).

599B Research and Thesis Pharmaceutical Chemistry (1-9).

599C Research and Thesis Pharmacology (1-9).

606 Biochemical Toxicology (3). Recent advances in organ-specific toxicity and the mechanisms of toxicity of drugs and environmental chemicals. Prerequisite: Consent of instructor. Winter, odd years.

615 Methods in Pharmacology and Toxicology (3). Exposure to some of the techniques employed in research in pharmacology and toxicology. One hour conference and six hours laboratory per week. Prerequisite: Permission of instructor.

616 Molecular Toxicology (3). Study of the molecular mechanisms of toxicity with emphasis on receptor theory and quantitative structure activity relationships. Three hours lecture or discussion a week. Prerequisites: PHARM 510 and 515 or permission of instructor. Winter, even years.*

625 Synthetic Medicinal Chemistry (3). Medicinal chemicals are considered as to their synthesis and structure-activity requirements as well as to current research and technology in the area. Offered on demand.*

631 Pharmaceutical Formulations I (3). Advanced theory and practice of Pharmaceutical formulations including classical and current research. This course will introduce the principles of biomaterial based drug delivery systems and unify knowledge from the fields of biology, materials science, and pharmaceuticals. Prerequisites: B.S in Pharmacy. Offered: Fall, odd years.*

632 Novel Drug Delivery Systems (3). The course offers up-to-date information about drug transport mechanisms and drug absorption processes across various absorptive membranes ie., buccal, nasal, dermal, corneal, pulmonary, and oral mucosae. The course material has been designed to provide current ideas and thinking about gene delivery, drug targeting to tumor cells and lipid and carrier mediated drug delivery. It provides unique information about cell culture models as a predictor of drug delivery as well as physical chemistry of surfaces in various microparticulates and lipid emulsion systems.

633 Receptor Pharmacology and Signal Transduction (3). Molecular characterization of drug receptors involving quantitative description of functional studies with agonists and antagonists and binding of ligands to receptors; the molecular structure of receptors and the signaling systems that couple receptors to their pharmacologic functions. Prerequisites: Biochemsitry 561/562 and/or Pharmacology 519/520. Offered: Every other Winter Other: When we have enough students willing to take course on demand.

645 Cancer Biotechnology I (3). This course is designed to provide a basic understanding of tumor progression, molecular events and signaling mechanisms underlying tumor formation. Epidemiological approaches, etiology, and current methods of detection and diagnosis of cancer will be discussed. Current pharmacological management strategies of cancer and future therapeutic interventions will also be reviewed. Prerequisite: BIOL 202 or equivalent. Fall, even years.

646 Cancer Biotechnology (3). Cancer Biotechnology II will focus on gene regulation of cancer cells with specific pharmaceutical agents. The course will target chemotherapeutic agents and examine current technology in gene therapy. Antisense and ribozyme DNA will also be discussed. Prerequisites: Phar 645 and Cancer Biotechnology I. Winter, odd years.

690B Special Topics Pharmaceutical Chemistry (1-3).

690BB Special Topics Toxicology (1-3).

690C Special Topics Pharmacology (1-3).

699A Research and Dissertation - Pharmacy (1-16).

699B Research and Dissertation Pharmaceutical Chemistry (1-16).

699BB Research and Dissertation Toxicology (1-16).

699C Research and Dissertation Pharmacology (1-16).

899 Required Graduate Enrollment (1).

Faculty of the University of Missouri-Kansas City

~ Associate or Adjunct Graduate Faculty * Members of UMKC Graduate Faculty

* Members of UMKC Graduate Faculty # Members of UMKC Doctoral Faculty

+ Located at UM-St. Louis campus

College of Arts and Sciences

Architecture, Urban Planning and Design

Joy D. Swallow; chair, department of architecture, urban planning and design, and associate professor of architecture; B.Arch. (Kansas State University); M.Arch. (University of Pennsylvania).

#*Michael Frisch; assistant professor of architecture, urban planning and design; M. City Planning (Massachusetts Institute of Technology); Ph.D. (Rutgers University).

Art and Art History

Eric J. Bransby; professor emeritus of art; B.A., M.A. (Colorado College); M.F.A. (Yale University).

Marilyn R. Carbonell; adjunct associate professor of art history and assistant director for collection development (library); B.A. (Knox College); M.A. (Northern Illinois University); M.A. (University of Iowa).

[~] #***Robert Cohon**; assistant research professor of art history; B.A. (Columbia University); M.A., Ph.D. (New York University).

#*Frances Connelly; associate professor of art history; B.A. (Wake Forest University); M.A. (University of Pittsburgh); M.F.A. (University of North Carolina at Greensboro); Ph.D. (University of Pittsburgh).

William G. Crist; professor of art; B.A. (University of Washington, Seattle); M.F.A. (Cranbrook Academy of Art).

Nancy DeLaurier; instructor emeritus of art; B.S. (Northwestern University).

#*Burton L. Dunbar, III; chair, department of art and art history, and professor of art history; B.A. (Park College); M.A., Ph.D. (University of Iowa).

George Ehrlich; professor emeritus of art history; B.S., M.F.A., Ph.D. (University of Illinois).

Geraldine E. Fowle; associate professor of art history; A.B. (Aquinas College); M.A., Ph.D. (University of Michigan).

Stephen J. Gosnell; associate professor of art; M.A. (State University of New York).

P. Elijah Gowin; assistant professor of art; B.A. (Davidson College); M.F.A. (University of New Mexico).

Edward Hogan; lecturer of art; B.F.A. (Kansas City Art Institute); M.A. (University of Missouri-Kansas City).

Leonard I. Koenig; professor of art; B.A. (Adelphi College); M.A. (University of Iowa); M.F.A. (University of Wisconsin-Madison).

Barbara A. Mueller; professor emeritus of art; B.A. (Maryville College); M.A. (University of Iowa).

*Craig A. Subler; associate professor of art and director of UMKC Gallery of Art; B.F.A. (Dayton Art Institute); M.A., M.F.A. (University of Iowa).

Joy D. Swallow; associate professor of architecture; B.Arch. (Kansas State University); M.Arch. (University of Pennsylvania).

*Kati Toivanen; assistant professor of digital media and photography; M.F.A. (School of the Art Institute of Chicago).

#*Maude Wahlman; Dorothy and Dale Thompson/Missouri Endowed Professor in Arts; B.A. (Colorado College); M.A. (Northwestern University); M.Phil., Ph.D. (Yale University).

Andrew Wells; visiting artist/assistant professor of digital media and communication studies; M.F.A. (School of the Art Institute of Chicago).

Mary Wessel; visiting artist/assistant professor of photography; M.F.A. (School of the Art Institute of Chicago). ***#Rochelle N. Ziskin**; assistant professor of art history; B.A. (University of Illinois-Chicago).

Chemistry

Keith R. Buszek; associate professor of chemistry; B.S. (University of California, Irvine); Ph.D. (University of California, Los Angeles).

#*Kuang Lu Cheng; professor emeritus of chemistry; B.S.

(Northwestern College, China); M.S., Ph.D. (University of Illinois). **John W. Connolly**; professor emeritus of chemistry; B.S. (Xavier University); Ph.D. (Purdue University).

Wesley J. Dale; professor emeritus of chemistry; B.S. (University of Illinois); Ph.D. (University of Minnesota).

#*Jerry R. Dias; professor of chemistry; B.S. (San Jose State College); Ph.D. (Arizona State University).

Henry A. Droll; professor emeritus of chemistry; B.S., M.S. (George Washington University); Ph.D. (University of Pennsylvania).

#*James R. Durig; Curators' Professor of chemistry and geosciences; B.A. (Washington and Jefferson College); Ph.D. (Massachusetts Institute of Technology).

Peter Groner; director of laboratories and associate professor of chemistry; Diploma, Ph.D. (Swiss Federal Polytechnic Institute).

Eckhard W. Hellmuth; professor emeritus of chemistry; B.S., M.S., Ph.D. (University of Marburg, Germany).

#*Andrew J. Holder; associate professor of chemistry; B.S. (Mobile College); Ph.D. (University of Southern Mississippi).

#*Y. C. Jerry Jean; chair, department of chemistry, and curators' professor of chemistry and physics; B.S. (Taipei Institute of Technology Taiwan); Ph.D. (Marquette University).

Ekaterina N. Kadnikova; assistant professor of chemistry; diploma in chemistry (Higher Chemical College of the Russian Academy of Sciences); Ph.D. (Iowa State University).

#*Kathleen V. Kilway; associate professor of chemistry; B.S. (St. Mary's College); M.S., Ph.D. (University of California-San Diego).

Peter F. Lott; professor emeritus of chemistry; B.S., M.S. (S. Lawrence University); Ph.D. (University of Connecticut).

Layton L. McCoy; professor emeritus of chemistry; B.S., Ph.D. (University of Washington).

Frank Millich; professor emeritus of chemistry; B.S. (City College of New York); M.S., Ph.D. (Brooklyn Polytechnic Institute).

#*Zhonghua Peng; professor of chemistry; B.S. (University of Science and Technology of China); M.S. (Chinese Academy of Sciences); Ph.D. (University of Chicago).

#*Thomas C. Sandreczki; professor of chemistry; B.A. (Houghton College); M.S., Ph.D. (University of Rochester).

#*Kenneth S. Schmitz; professor of chemistry; B.A. (Greenville College); Ph.D. (University of Washington-Seattle).

*Timothy F. Thomas; professor emeritus of chemistry; A.B. (Oberlin College); Ph.D. (University of Oregon).

#*Charles J. Wurrey; executive associate dean and curators' distinguished teaching professor of chemistry; B.S. (Northern Michigan University); Ph.D. (Massachusetts Institute of Technology).

Communications Studies

#*Joan E. Aitken; professor of communication studies, graduate adviser; B.A. (Michigan State University); M.A., Ed.D. (University of Arkansas).

Gregory D. Black; professor emeritus of communication studies; B.S. (Bowling Green State University); M.A. (California State); Ph.D. (University of Kansas).

*Linda M. Collier; associate professor of communication studies; director of debate; B.A., J.D. (University of Missouri-Kansas City).

Angela C. Elam; assistant professor of communication studies and radio producer; B.A. (Clemson University); M.F.A. (University of Georgia-Athens).

Daven Gee; assistant professor of communication studies; B.A. (California State University, Chico & University of Hawaii, Hilo; M.F.A. (San Francisco State University).

*Gregory Gutenko; associate professor of communication studies; B.A., M.A. (University of Missouri-Kansas City); Ph.D. (University of Missouri-Columbia).

#*Carol F. Koehler; associate professor of communication studies; B.A. (Rosary College); M.A., Ph.D. (University of Missouri-Kansas City).

Gaylord V. Marr; professor emeritus of communication studies; B.A., M.A. (University of Nebraska).

Judith McCormick; associate dean and assistant professor of communication studies; B.A., M.A. (Texas Tech University), Ph.D. (Kansas State University).

***Peter Morello**; assistant professor of communication studies; B.A. (University of Wisconsin-Madison); M.S. (Columbia University).

Michael Neer; professor of communication studies; B.A., M.A., Ph.D. (University of Missouri-Columbia).

*G. Thomas Poe; chair, department of communication studies, and associate professor of communication studies; B.A. (Central Methodist College); M.A. (Northwest Missouri State), M.Div. (Emory University), M.A. (University of Missouri-Kansas City); Ph.D. (University of Kansas).

#*Robert B. Unger; professor of communication studies and English; B.A. (University of Missouri-Columbia); M.P.A. (Harvard University).

Economics

#*Stephanie A. Bell; assistant professor of economics; B.A. (California State University-Sacramento); M.Phil. (Cambridge University); Ph.D. (New School for Social Research).

#*W. Robert Brazelton; professor emeritus of economics; B.A. (Dartmouth College); M.A., Ph.D. (University of Oklahoma).

#*Cathy Carroll; assistant professor of economics and pharmacy; B.S., M.B.A. (University of Missouri-Kansas City); M.A., Ph.D. (University of Kansas).

#*Peter J. Eaton; associate professor of economics; B.A. (University of Santa Clara); Ph.D. (University of Florida).

#*Mathew Forstater; associate professor of economics; B.A. (Temple University); M.A. (New School for Social Research); Ph.D. (New School for Social Research).

#*L. Kenneth Hubbell; professor emeritus of economics and joint professor in the L.P. Cookingham Institute of Public Affairs; B.A., M.A. (Texas Christian University); Ph.D. (University of Nebraska).

#*Fredric S. Lee; professor of economics; B.A. (Frostburg State University); M.Phil, Ph.D. (Rutgers University).

Ross Shepherd; professor emeritus of economics; A.B. (Harvard University); M.A., Ph.D. (Syracuse University).

#*James I. Sturgeon; chair, department of economics, and professor of economics; B.A. (Kansas State Teachers College-Emporia); M.A. (University of Missouri-Kansas City); Ph.D. (University of Oklahoma).

#*Karen S. Vorst; professor of economics; B.S. (Bowling Green State University); Ph.D. (Indiana University).

F. Eugene Wagner; professor of economics; B.A., M.S. (University of Missouri-Kansas City); Ph.D. (Syracuse University).

#*John O. Ward; professor emeritus of economics; B.A., M.A. (University of Toledo); Ph.D. (University of Oklahoma).

#*L. Randall Wray; professor of economics; B.A. (University of the Pacific); M.A. (Washington University); Ph.D. (Washington University).

English Language and Literature

#*Kimberly J. Banks; assistant professor of English; B.A. (University of Maryland); M.A., Ph.D. (Rutgers University). ***Ralph A. Berets**; associate professor emeritus of English; B.A., M.A., Ph.D. (University of Michigan).

#*Virginia Blanton; assistant professor of English; B.A. (Southwestern College); M.A., Ph.D. (Binghamton University).

***Michelle A. Boisseau**; associate professor of English; B.A., M.A. (Ohio University); Ph.D. (University of Houston).

#*Joan F. Dean; distinguished teaching professor of English; A.B. (Canisius College); M.A., Ph.D. (Purdue University).

#*Stephen Dilks; associate professor of English; B.A. (University of Stirling, Scotland); M.A., Ph.D. (Rutgers University).

Laurie Ellinghausen; assistant professor of English; B.A. (University of Houston), M.A. (Ohio State University), Ph.D. (University of California-Santa Barbara).

Robert M. Farnsworth; professor emeritus of English; B.A. (University of Michigan); M.S. (University of Connecticut); Ph.D. (Tulane University).

#*Moira Ferguson; professor of English and Martha Jane Phillips Starr/Missouri Endowed Professor in Women's and Gender Studies; B.A. (University of London, Birkbeck College); M.A., Ph.D. (University of Washington, Seattle).

#*Jane Greer; associate professor of English; B.A. (Hanover College); M.A., Ph.D. (Ohio State University).

Sheila Honig; lecturer in English; B.A., M.A. (University of Missouri-Columbia).

Daniel Freeman Jaffe; professor emeritus of English and editor of BkMk Press; B.A. (Rutgers University); M.A. (University of Michigan).

Maureen Maginn; lecturer in English; B.A. (University of Missouri-Columbia); M.A. (University of Missouri-Kansas City).

#*Daniel Mahala; associate professor of English; B.A. (State University of New York at Binghamton); M.A. (New York University); D.A. (State University of New York at Albany).

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#*Robert F. Willson, Jr.; professor emeritus of English; B.A. (Wayne State University); M.A., Ph.D. (University of Wisconsin).

Foreign Languages and Literatures

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Geosciences

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#*Caroline P. Davies; assistant professor of geosciences; B.A. (College of William-Smith); M.S. (University of Maine); Ph.D. (Arizona State University).

#*Steven L. Driever; professor of geosciences; B.A. (University of Virginia); M.S. (Northwestern University); Ph.D. (University of Georgia).

#*Richard J. Gentile; emeritus professor of geosciences; B.A., M.A. (University of Missouri-Columbia); Ph.D. (University of Missouri-Rolla).

*Martha W. Gilliland; chancellor, UMKC, and professor of geosciences; B.A. (Catawba College), M.A. (Rice University); Ph.D. (University of Florida).

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#*Wei Ji; associate professor of geosciences; B.S., M.S. (Peking University); Ph.D. (University of Connecticut).

#*Jejung Lee; assistant professor of geosciences; B.S., M.S. (Seoul National University); Ph.D. (Northwestern University).

#*Anil Misra; associate professor of civil engineering and adjunct professor of geosciences; B.Tech.Ci.E. (Indian Institute of Technology); M.S.Ci.E., Ph.D. (University of Massachusetts), P.E.

#*Deborah J. O'Bannon; associate professor of computing and engineering and adjunct professor of geosciences; B.S.C.E. (Massachusetts Institute of Technology); C.E. (Manhattan College); Ph.D. (University of Iowa); P.E.

James B. Murowchick; associate professor of geosciences; B.S. (University of Illinois); M.S., Ph.D. (Pennsylvania State University). #*Tina M. Niemi; associate professor of geosciences; B.A. (College

of Wooster); M.S., Ph.D. (Stanford University).

Eldon J. Parizek; dean emeritus, college of arts and sciences, and professor emeritus of geosciences; B.S., M.S., Ph.D. (University of Iowa).

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History

William B. Ashworth, Jr.; associate professor of history; B.A. (Wesleyan University); Ph.D. (University of Wisconsin).

#*Andrew Bergerson; assistant professor of history; B.A. (Cornell University); M.A. (University of Edinburgh); Ph. D. (University of Chicago).

Diane M. Burke; assistant professor of history; B.A. (Dartmouth College); M.A., Ph.D. (Emory University).

Jesse V. Clardy; professor emeritus of history; B.S., M.S. (Texas College of Arts and Industries); Ph.D. (University of Michigan).

#*Gary L. Ebersole; professor of history; B.A. (Dickinson College); M.A., Ph.D. (University of Chicago).

*James Stephen Falls; associate professor of history; B.A. (University of Alabama); M.A., Ph.D. (Mississippi State University). #*Miriam Forman-Brunell; professor of history; A.B., M.A. (Sarah

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John T. Graham; professor emeritus of history; A.B. (Rockhurst College); Ph.D. (St. Louis University).

#*Herman M. Hattaway; professor emeritus of history; B.A., M.A., Ph.D. (Louisiana State University).

#*Carla L. Klausner; professor of history; B.A. (Barnard College); M.A. (Radcliffe College); Ph.D. (Harvard University).

#*Lawrence H. Larsen; professor emeritus of history; B.S. (Lawrence College); M.S., Ph.D. (University of Wisconsin).

#*Bryan F. LeBeau; dean, college of arts and sciences, and professor of history; B.A. (Massachusetts College of Liberal Arts); M.A. (Pennsylvania State University); Ph.D. (New York University).

#*Dennis Merrill; professor of history; B.A. (Providence College); M.A., Ph.D. (University of Connecticut).

James C. Olson; president emeritus and professor emeritus of history; B.A. (Morningside College); M.S., Ph.D. (University of Nebraska).

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#*Patrick A. Peebles; professor of history; B.A. (University of California-Berkeley); M.A., Ph.D. (University of Chicago).

Linna F. Place; Lecturer/University Liaison to the Harry S. Truman Presidential Library; B.A. (Denison University); M.A. (Cooperstown Graduate Programs), Ph.D. (Kansas University).

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~ #*Frederick Spletstoser ; adjunct instructor of history; Ph.D. (Louisiana State University).

*William O. Stevens; adjunct assistant professor of history; B.S., M.S. (Central Missouri State College); M.A., Ph.D. (University of Missouri-Kansas City). ~ Russell Reed Whitaker; director, National Archives - Great Plains and adjunct associate professor of history; B.A. (Washburn University).

[~]#William S. Worley; adjunct instructor of history; Ph.D. (University of Kansas).

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~***Mary Ann Wynkoop**; director of American studies program, coordinator of general studies program and adjunct instructor of history; Ph.D. (University of Indiana).

Mathematics

#*Jie Chen; associate professor of statistics; B.S. (Chongqing University); M.S. (University of Akron); Ph.D. (Bowling Green State University).

Richard Delaware; visiting assistant professor of mathematics; M.S. (University of Kansas); Ph.D. (University of Missouri - Kansas City).

Eric J. Hall; assistant professor of mathematics; Ph.D. (University of Michigan).

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#*Hristo D. Voulov; assistant professor of mathematics; Ph.D. (Sofia University, Bulgaria).

#*Yong Zeng; assistant professor of statistics; Ph.D. (University of Wisconsin - Madison).

Philosophy

Bruce Bubacz; curators' professor of philosophy and professor of law; B.A. (Ripon College); M.S., Ph.D. (University of Washington-Seattle).

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Solomon E. Levy; professor emeritus of philosophy; B.A. (Brooklyn College); Ph.D. (University of Southern California).

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Edward F. Walter; professor emeritus of philosophy; B.A. (St. John's University); M.A., Ph.D. (New York University).

Physics

Keith M. Ashman; assistant professor of physics; B.Sc. (Queen Mary College, London); Ph.D. (School of Mathematical Sciences, Queen Mary College, London).

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#*Y. C. Jerry Jean; chairman, department of chemistry, and professor of chemistry and physics; B.S. (Taipei Institute of Technology Taiwan); Ph.D. (Marquette University).

#*Michael B. Kruger; associate professor of physics; B.S. (State University of New York-Stony Brook); Ph.D.(University of California-Berkeley).

Fred M. Leibsle; assistant professor of physics; B.S. (University of Wisconsin); Ph.D. (University of Illinois).

#*Richard D. Murphy; professor of physics; B.A. (University of Colorado); M.A., Ph.D. (University of Minnesota).

#*James M. Phillips; professor of physics; B.S., B.S.Ed. (Central Missouri State College); Ph.D. (University of Missouri-Rolla).

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Political Science

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#*Christopher Lovelace; assistant professor of psychology; B.A. (Wake Forest University); M.A., Ph.D. (American University).

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Graduate Social Work

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#*Lee Rathbone-McCuan; professor of social work; B.A. (University of Kentucky); M.S.W., Ph.D. (University of Pittsburg).

Sociology/Criminal Justice and Criminology

#*Leanne Fiftal Alarid; associate professor of criminal justice and criminology; B.A. (University of Northern Colorado); M.A, Ph.D. (Sam Houston State University).

#*James F. Anderson; associate professor of criminal justice and criminology; B.A., M.S. (Alabama State University); Ph.D. (Sam Houston State University).

#*Barbara Bonnekessen ; visiting assistant professor of anthropology; Undergraduate Equivalent (Institute for Ancient American Languages and Cultures, University of Hamburg, Germany); M.S. (Purdue University); Ph.D. (University of Kansas).

#*Linda M. Breytspraak; chair, department of sociology, and associate professor of sociology and medicine; B.A. (Colorado College); M.A., Ph.D. (Duke University).

#*C. Neil Bull; professor emeritus of sociology; B.A., M.A. (University of British Columbia); Ph.D. (University of Oregon).

Henry G. Burger; professor emeritus of education and anthropology; B.A., M.A., Ph.D. (Columbia University).

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Oscar R. Eggers; professor emeritus of sociology; B.A., M.A., Ph.D. (University of Chicago).

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#*Alexander Holsinger; assistant professor of criminal justice and criminology; B.A. (Aquinas College); M.S. (Illinois State University); Ph.D. (University of Cincinnati).

#*Kristi Holsinger; assistant professor of criminal justice and criminology; B.A. (Aquinas College); M.S., Ph.D. (University of Cincinnati).

#*Shannon Jackson; assistant professor of anthropology; B.A., M.A. (University of Connecticut); Ph.D. (University of Chicago).

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David W. Moller; associate professor of medical humanities and sociology; B.A. (Siena College); M.A. (New School for Social Research); M. Phil., Ph.D. (Columbia University).

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#*Tanya Price; assistant professor of anthropology; A.B. (Miami University); M.A., Ph.D. (Indiana University).

#*Peter M. Singlemann; associate professor of sociology; B.A. (University of Hamburg-Germany); Ph.D. (University of Texas).

#*Deborah Smith; associate professor of sociology and director of family studies; B.S., Ph.D. (Cornell University); M.A. (University of Minnesota).

Theatre

Peter Altman; visiting professor of theatre; Producing Artistic Director, Missouri Repertory Theatre; B.A. (University of California at Berkeley); M.A. (University of Pennsylvania).

*Louis Colaianni; associate professor of theatre.

Lindsay Davis; associate professor of theatre; B.A. (Harvard College); M.F.A. (New York University-Tisch School of the Arts). *John Ezell; Hall Family Foundation Professor of Design; B.F.A. (Washington University); M.F.A. (Yale University).

Gene Friedman; assistant professor of theatre.

*Charles Hayes; assistant professor of theatre; B.A. (Augustana College); M.F.A. (University of Iowa).

Gary Holcombe; assistant professor of theatre; B.A. (Morehead State University); M.M. (Indiana University); D.M.A. (University of Maryland).

Barry Kyle; professor of theatre arts; M.A. (University of Birmingham-U.K.).

#*Felicia Londre; curators' professor of theatre; B.A. (University of Montana); M.A. (University of Washington-Seattle); Ph.D. (University of Wisconsin-Madison).

[~] **Tom Mardikes**; chair, department of theatre, and associate professor of theatre; B.A., M.F.A. (University of Missouri-Kansas City).

#*Jennifer K. Martin; Hall Family Foundation Professor of Movement; B.S. (Bowling Green State University); M.F.A. (University of North Carolina-Greensboro); Ph.D. (University of Michigan).

*Joe Price; assistant professor of theatre; B.F.A. (University of Minnesota-Duluth); M.F.A. (Southern Methodist University).

Dennis Rosa; visiting professor of theatre; Artistic Director, UMVN (University of Missouri Video Network).

***Ronald Lee Schaeffer**; associate professor of theatre; B.S. (Bradley University); M.A. (University of Missouri-Kansas City).

*Victor Tan; associate professor of theatre.

Stephen Buescher, **Joe Krienke** and **Stephanie Thompson** are in residence teaching physical theatre skills for graduate actors.

Jacques Burdick; professor emeritus of theatre.

Cal Pritner; professor emeritus of theatre.

Vincent Scassellati; associate professor emeritus of theatre.

*Douglas C. Taylor; professor emeritus of theatre.

School of Biological Sciences

#*Karen J. Bame; associate professor of biological sciences; B.S. (University of California-Santa Barbara); Ph.D. (University of California-Los Angeles).

James M. Benevides; research assistant professor of biological sciences; B.S. (University of Massachusetts); M.S., Ph.D. (University of Rhode Island).

Raymond L. Burich; associate professor emeritus of biological sciences; B.S., M.S. (Kent State University); Ph.D. (Iowa State University).

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~ Richard Lee Williams; assistant professor of music (coach-accompanist, foreign language for singing); B.A., B.M. (University of Akron); M.M. (University of Illinois).

[~] **Zhou Long**; visiting professor (composition); (Central Conservatory in Beijing); D.M.A. (Columbia University).

School of Nursing

#*Kathryn A. Ballou; assistant professor of nursing; B.S.N., M.S.N. (University of Missouri-Kansas City); Ph.D. (University of Kansas).

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#*Judith Beyer; associate professor of nursing; B.S.N.E. (Wilkes College); M.S. (Boston University); Ph.D. (University of Texas).

#*Terry A. Buford; assistant professor of nursing; B.S.N. (University of Missouri-Columbia); M.N. (University of Kansas); Ph.D. (University of Missouri-Columbia).

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Joyce E. Clement; clinical instructor of nursing; B.S.N. (University of Massachusetts); M.S.N. (University of Missouri-Kansas City).

M. Susan Emerson; clinical assistant professor of nursing; B.S.N., M.S.N. (University of Missouri-Kansas City); M.S., Ph.D. (Kansas State University).

#*Maithe Enriquez; assistant professor of nursing; B.S.N. (Webster University); M.S.N., Ph.D. (University of Missouri-Kansas City).

#*Marjorie A. Fonza; clinical associate professor of nursing; B.S.N. (Marillac College); M.A. (Sangamon State University); M.S.N. (Southern Illinois University-Edwardsville); DNSc (Rush University).

#*Tina Hines; Dorothy and Dale Thompson/Missouri Endowed Professor in Nursing; B.A. (George Washington University); B.S.N. (Spalding University); Ph.D. (University of Louisville).

#*Jennifer Hunter; assistant professor of nursing; B.S.N. (University of Tulsa); M.S.N., Ph.D. (University of Kansas).

Susan J. Kimble; clinical instructor of nursing; B.S.W. (University of Nebraska); B.S.N., M.S.N. (University of Missouri-Kansas City).

Mary L. Kinnaman; clinical instructor of nursing; B.S.N., M.N. (University of Kansas).

#*Steve Krantz; associate professor of nursing/education; B.A., M.S. (University of Utah); Ph.D. (Utah State University).

*Lora Lacey-Haun; dean, school of nursing, and professor of nursing; B.S.N., M.S.N. (University of Alabama-Birmingham); Ph.D. (University of Missouri-Kansas City).

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#*Jana L. Pressler; associate professor of nursing; B.A., (Bradley University); M.A. (University of Iowa); Ph.D. (Case Western Reserve University). **#*Lynn M. Rasmussen**; assistant professor of nursing; B.S.N., M.S.N. (University of Kansas); Ph.D. (University of Missouri-Kansas City).

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Christine M. Zimmerman; clinical instructor of nursing; B.S.N. (Creighton University); M.S.N. (University of Missouri-Kansas City).

School of Pharmacy

#*Mostafa Z. Badr; associate professor of pharmacology; B.S., M.S. (Cairo University, Egypt); Ph.D. (University of Louisville).

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Patrick J. Bryant; clinical associate professor of pharmacy practice and director, UMKC Drug Information Center; Pharm.D. (University of Nebraska Medical Center).

Cathryn A. Carroll; assistant professor of pharmacy practice; B.S., M.B.A. (University of Missouri-Kansas City); M.S., Ph.D. (University of Kansas).

Lester Chafetz; professor emeritus of pharmaceutical science and director, Center for Pharmaceutical Technology; B.S. (University of Rhode Island); M.S., Ph.D. (University of Wisconsin).

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Maqual Graham; assistant professor of pharmacy practice; Pharm.D. (University of Missouri-Kansas City).

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#*Thomas P. Johnston; associate professor of pharmaceutical sciences; B.S., Ph.D. (University of Minnesota).

#*Gregory L. Kearns; Marion Merrell Dow/Missouri Endowed Chair in Pediatric Clinical Pharmacology; Pharm.D. (University of Cincinnati).

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Cameron C. Lindsey; assistant professor of pharmacy practice; Pharm.D. (University of Missouri-Kansas City).

Harold J. Manley; assistant professor of pharmacy practice; B.S., Pharm.D. (Albany College of Pharmacy).

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Steven Stoner; clinical associate professor of pharmacy practice; Pharm.D. (University of Nebraska).

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Jianping Wang; assistant professor of pharmacology; M.D., M.S. (Second Military Medical University); Ph.D. (Louisiana State University of Health Sciences Center).

#*John Q. Wang; associate professor of pharmacology; M.D. (Medical College of Wuhan, China); M.Sc. (Tongi Medical University, China); Ph.D. (Shanghai Medical University, China).

#*David M. Yourtee; professor of pharmacology, School of Pharmacy and School of Medicine; B.S. (University of Missouri-Columbia); Ph.D. (University of Missouri-Kansas City).

Appendices Addresses and Phone Numbers

The main telephone number of the University is (816) 235-**1000**. Operators are on duty Monday through Friday, 8 a.m. to 5 p.m., to direct calls. Application and admission questions should be directed to (816) 235-**1111**.

The main University Web site is http://www.umkc.edu.

The official mailing address is: University of Missouri - Kansas City 5100 Rockhill Road Kansas City, MO 64110-2499

All other addresses shown are for locator purposes only.

Academic Units

College of Arts and Sciences Scofield Hall, 711 E. 51st Street, (816) 235-1136, college@umkc.edu, www.umkc.edu/college. School of Biological Sciences Biological Science Building, 5007 Rockhill Road, (816) 235-1388, sbs-grad@umkc.edu, www.umkc.edu/sbs. Henry W. Bloch School of Business and Public Administration 5110 Cherry Street, (816) 235-2215, bloch@umkc.edu, www.umkc.edu/bloch. School of Computing and Engineering 534 Flarsheim Hall, 5110 Rockhill Road, (816) 235-2399, sce@umkc.edu, www.umkc.edu/sce. School of Dentistry 650 E. 25th Street, (816) 235-2100, dentistry@umkc.edu, www.umkc.edu/dentistry. School of Education 615 E. 52nd Street, (816) 235-2234, education@umkc.edu, www.umkc.edu/education. School of Graduate Studies 300F Administrative Center, 5115 Oak Street, (816) 235-1161, graduate@umkc.edu, www.umkc.edu/sgs. School of Law 500 E. 52nd Street, (816) 235-1644, law@umkc.edu, www.umkc.edu/law. School of Medicine 2411 Holmes Street, (816) 235-1808, medicine@umkc.edu, www.umkc.edu/medicine. Conservatory of Music Performing Arts Center, 4949 Cherry Street, (816) 235-2900, conservatory@umkc.edu, www.umkc.edu/conservatory. School of Nursing 2220 Holmes Street, (816) 235-1700, nurses@umkc.edu, www.umkc.edu/nursing. School of Pharmacy Katz Pharmacy Bldg., 5005 Rockhill Road, (816) 235-1609, pharmacy@umkc.edu, www.umkc.edu/pharmacy. Departments of the College of Arts and Sciences American Studies 204G Haag Hall, 5120 Rockhill Road, (816) 235-1137,

am-st@umkc.edu, http://www.umkc.edu/am-st. Architecture, Urban Planning and Design Epperson House, 5200 Cherry Street, (816) 235-**1725**, arch@umkc.edu, http://www.umkc.edu/arch. Art and Art History 204 Fine Arts Building, 5015 Holmes Street, (816) 235-1501, art@umkc.edu, http://www.umkc.edu/art. Chemistry Spencer Chemistry Building, 5009 Rockhill Road, (816) 235-2273, Fax: (816) 235-5502, chemistry@umkc.edu, http://www.umkc.edu/chem. **Communication Studies** 202 Haag Hall, 5120 Rockhill Road, (816) 235-1337, Fax: (816) 235-5539, com-s@umkc.edu, http://www.umkc.edu/com-s. Economics 211 Haag Hall, 5120 Rockhill Road, (816) 235-1314, Fax: (816) 235-2834, economics@umkc.edu, http://www.umkc.edu/economics. English Language and Literature 106 Cockefair Hall, 5121 Rockhill Road, (816) 235-1305 or (816) 235-1307, Fax: (816) 235-1308, english@umkc.edu, http://www.umkc.edu/english. Foreign Languages and Literatures 216 Scofield Hall, 711 East 51st Street, (816) 235-1311, Fax: (816) 235-1312, frn-lg@umkc.edu, http://www.umkc.edu/frn-lg. Geosciences 420 R.H. Flarsheim Hall, 5110 Rockhill Road, (816) 235-1334, Fax: (816) 235-5535, geosciences@umkc.edu, http://www.umkc.edu/geosciences. History 203 Cockefair Hall, 5121 Rockhill Road, (816) 235-1631, Fax: (816) 235-5723, history@umkc.edu, http://www.umkc.edu/history. Mathematics and Statistics 206 Haag Hall, 5120 Rockhill Road, (816) 235-1641, math@umkc.edu, http://www.umkc.edu/math. Philosophy 222 Cockefair Hall, 5121 Rockhill Road, (816) 235-1331, Fax: (816) 235-2819, philosophy@umkc.edu, http://www.umkc.edu/philosophy. Physics 257 R.H. Flarsheim Hall, 5110 Rockhill Road, (816) 235-1604, Fax: (816) 235-5221, physics@umkc.edu, http://www.umkc.edu/physics. Political Science 213 Haag Hall, 5120 Rockhill Road, (816) 235-1326, Fax: (816) 235-5594, pol-sc@umkc.edu, http://www.umkc.edu/pol-sc. Psychology 4825 Troost Avenue, Suite 215, (816) 235-1318, Fax: (816) 235-1062, psychology@umkc.edu, http://www.umkc.edu/psychology. **Religious Studies** 204E Haag Hall, 5120 Rockhill Road, (816) 235-5704 or (816) 235-5854, Fax: (816) 235-5542, rel-st@umkc.edu, http://www.umkc.edu/rel-st. School of Social Work 4825 Troost Avenue, Suite 106, (816) 235-1025, Fax: (816) 235-6573, soc-wk@umkc.edu, http://www.umkc.edu/soc-wk. Sociology/Criminal Justice and Criminology 208 Haag Hall, 5120 Rockhill Road, (816) 235-1116, Fax: (816) 235-1117, sociology@umkc.edu, http://www.umkc.edu/sociology. Theatre 408 Center for the Performing Arts, 4949 Cherry Street, (816) 235-2702, Fax: (816) 235-6562,

theatre@umkc.edu, http://www.umkc.edu/theatre.

Departments and Offices

Academic Advising/Information, Arts and Sciences Contact specific department as indicated within catalog. Admissions, Office of, 120 Administrative Center, 5115 Oak Street, (816) 235-1111, admit@umkc.edu, www.umkc.edu/admit. Admissions testing; Counseling, Health and Testing Center Room 206, 4825 Troost Building, (816) 235-1635, chtc@umkc.edu, www.umkc.edu/chtc/testing. Applications for Assistantships Contact specific department or school. Athletics, Dept. of Intercollegiate 201 Swinney Recreation Center, 5030 Holmes Street, (816) 235-1036, athletics@umkc.edu, www.umkc.edu/athletics. Automobile Registration, Parking Operations 221 Administrative Center, 5115 Oak Street (816) 235-5256, parking@umkc.edu, www.umkc.edu/parking. Berkley Child and Family Development Center 1012 E. 52nd Street, (816) 235-2600. Call Center (816) 235-2000, callcenter@umkc.edu. Technicians are on duty Monday - Friday, 7 a.m. to 7 p.m., to provide computer support on campus. Counseling, Health and Testing Center Suite 206, 4825 Troost Building, (816) 235-1635, chtc@umkc.edu, www.umkc.edu/chtc. Disabled Student Services, Room 23, lower level of U. Center 5000 Holmes Street, (816) 235-5696, disability@umkc.edu, www.umkc.edu/disability. Fees (Cashier's Office) 112 Administrative Center, 5115 Oak Street, (816) 235-1365, cashiers@umkc.edu, www.umkc.edu/cashiers. Financial Aid and Scholarships Office 101 Administrative Center, 5115 Oak Street, (816) 235-1154, finaid@umkc.edu, www.umkc.edu/finaid. Housing, Residential Life Office, Room 106 North Twin Oaks Apartments, 5000 Oak Street, (816) 235-8956, housing@umkc.edu, www.umkc.edu/housing. Housing, Residence Hall Office 5030 Cherry Street, (816) 235-2800, housing@umkc.edu, www.umkc.edu/housing. Information Center, Campus Lobby, University Center, 50th and Rockhill Road, (816) 235-5555. International Student Affairs, Office of 5235 Rockhill Road, (816) 235-1113, isao@umkc.edu, www.umkc.edu/isao. Missouri Repertory Theatre Central Ticket Office, Performing Arts Center, 4949 Cherry Street, (816) 235-2700, www.umkc.edu/mrt. Minority Student Affairs 5245 Rockhill Road, (816) 235-1109, msa@umkc.edu, www.umkc.edu/msa. Police, UMKC Room 213, 4825 Troost Building, (816) 235-1515, www.umkc.edu/police. Registration, UMKC Registration Center 116 Administrative Center, 5115 Oak Street, (816) 235-1125, registrar@umkc.edu, www.umkc.edu/registrar. Student Health and Wellness Center Room 115, 4825 Troost Building, (816) 235-6133, studenthealth@umkc.edu, www.umkc.edu/studenthealth.

Student Life, Office of G6 University Center, 50th and Rockhill Road, (816) 235-1407, stulife@umkc.edu, www.umkc.edu/stulife. Transfer Credit Policies, Admissions/Enrollment Services 120 Administrative Center, 5115 Oak Street, (816) 235-1111, admit@umkc.edu, www.umkc.edu/admit. Transcripts and Records, UMKC Records Office 115 Administrative Center, 5115 Oak Street, (816) 235-1121, registrar@umkc.edu, www.umkc.edu/registrar/g_n_t.html. University News (UMKC Student Newspaper) 5327 Holmes Street, (816) 235-1393, www.unews.com. Veterans Services, Veteran Affairs 115 Administrative Center, 5115 Oak Street, (816) 235-1112. Welcome Center, 120 Administrative Center, 5115 Oak Street, (816) 235-8652; (816) 235-UMKC, welcome@umkc.edu, www.umkc.edu/welcome. Women's Center 105 Haag Hall, 5120 Rockhill Road, (816) 235-1638. womens-center@umkc.edu, www.umkc.edu/womenc.

Policies and Procedures

Student Conduct

(200.010 Standard of Conduct; Amended Bd. Min. 3-20-81; Bd. Min. 8-3-90, Bd. Min 5-19-94; Bd. Min. 5-24-01.)

This policy is also available at

http://www.umsystem.edu/uminfo/rules/programs/200010.htm.

A student enrolling in the University assumes an obligation to behave in a manner compatible with the University's function as an educational institution.

A. JURISDICTION OF THE UNIVERSITY OF MISSOURI

generally shall be limited to conduct which occurs on the University of Missouri premises or at University-sponsored or University-supervised functions. However, nothing restrains the administration of the University of Missouri from taking appropriate action, including, but not limited to, the imposition of sanctions under

Section 200.020 (C), against students for conduct on or off University premises in order to protect the physical safety of students, faculty, staff and visitors.

B. CONDUCT for which students are subject to sanctions falls into the following categories:

- Academic dishonesty, such as cheating, plagiarism, or sabotage. The Board of Curators recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards. In all cases of academic dishonesty, the instructor shall make an academic judgment about the student's grade on that work and in that course. The instructor shall report the alleged academic dishonesty to the Primary Administrative Officer.
 - a. The term **cheating** includes but is not limited to:
 - (i) use of any unauthorized assistance in taking quizzes, tests, or examinations;(ii) dependence upon the aid of sources beyond those
 - authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
 - (iii) acquisition or possession without permission of tests or other academic material belonging to a member of the University faculty or staff; or
 - (iv) knowingly providing any unauthorized assistance to another student on quizzes, tests, or examinations.
 - b. The term **plagiarism** includes, but is not limited to:

 (i) use by paraphrase or direct quotation of the published or unpublished work of another person without fully and properly crediting the author with footnotes, citations or bibliographical reference;
 - (ii) unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials; or
 - (iii) unacknowledged use of original work/material that has been produced through collaboration with others without release in writing from collaborators.
 - c. The term **sabotage** includes, but is not limited to, the unauthorized interference with, modification of, or destruction of the work or intellectual property of another member of the University community.
- 2. Forgery, alteration, or misuse of University documents, records or identification, or knowingly furnishing false information to the University.
- Obstruction or disruption of teaching, research, administration, conduct proceedings, or other University activities, including its public service functions on or off campus.
- 4. Physical abuse or other conduct which threatens or endangers the health or safety of any person.
- 5. Attempted or actual theft of, damage to, or possession without permission of property of the University or of a member of the University community or of a campus visitor.
- 6. Unauthorized possession, duplication or use of keys to any University facilities or unauthorized entry to or use of University facilities.

- 7. Violation of University policies, rules or regulations or of campus regulations including, but not limited to, those governing residence in University-provided housing, or the use of University facilities, or the time, place and manner of public expression.
- 8. Manufacture, use, possession, sale or distribution of alcoholic beverages or any controlled substance without proper prescription or required license or as expressly permitted by law or University regulations, including operating a vehicle on University property, or on streets or roadways adjacent to and abutting a campus, under the influence of alcohol or a controlled substance as prohibited by law of the state of Missouri.
- 9. Disruptive or disorderly conduct or lewd, indecent, or obscene conduct or expression.
- 10. Failure to comply with directions of University officials acting in the performance of their duties.
- 11. The illegal or unauthorized possession or use of firearms, explosives, other weapons, or hazardous chemicals.
- Misuse in accordance with University policy of computing resources, including but not limited to:
 - a. Actual or attempted theft or other abuse.
 - b. Unauthorized entry into a file to use, read, or change the contents, or for any other purpose.
 - c. Unauthorized transfer of a file.
 - d. Unauthorized use of another individual's identification and password.
 - e. Use of computing facilities to interfere with the work of another student, faculty member, or University official.
 - f. Use of computing facilities to interfere with normal operation of the University computing system.
 - g. Knowingly causing a computer virus to become installed in a computer system or file.

Rules of Procedures in Student Conduct Matters

(200.020 Rules of Procedures in Student Conduct Matters; Bd. Min. 11-8-68, Amended Bd. Min. 3-20-81; Bd. Min. 12-8-89, Amended 5-19-94; Bd. Min. 5-24-01.)

This policy is also available at

http://www.umsystem.edu/uminfo/rules/programs/200020.htm.

A. PREAMBLE. The following rules of procedure in student conduct matters are hereby adopted in order to insure insofar as possible and practicable

- (a) that the requirements of procedural due process in student conduct proceedings will be fulfilled by the University,
- (b) that the immediate effectiveness of Section 10.030, which is Article V of the Bylaws of the Board of Curators relating to student conduct and sanctions may be secured for all students in the University of Missouri, and
- (c) that procedures shall be definite and determinable within the University of Missouri.

B. DEFINITIONS. As used in these rules, the following definitions shall apply:

- 1. **Primary Administrative Officers.** As used in these procedures, the Chief Student Affairs Administrator on each campus is the Primary Administrative Officer except in cases of academic dishonesty, where the Chief Academic Administrator is the Primary Administrative Officer. Each Primary Administrative Officer may appoint designee(s) who are responsible for the administration of these conduct procedures, provided all such appointments must be in writing, filed with the Chancellor of the campus, and the office of General Counsel. The Primary Administrator's Office will certify in writing that the given designee has been trained in the administration of student conduct matters.
- 2. **Student Panel.** A panel of students appointed by the Chancellor, from which shall be selected by the Chair, upon the request of a student charged before the Student Conduct Committee, not more than three students to serve with the Student Conduct Committee.
- 3. **Student.** A person having once been admitted to the University who has not completed a course of study and who intends to or

does continue a course of study in or through one of the campuses of the University. For the purpose of these rules, student status continues whether or not the University's academic programs are in session.

4. **Student Conduct Committee.** As used in these procedures, "Student Conduct Committee," hereinafter referred to as the Committee, is that body on each campus which is authorized to conduct hearings and to make dispositions under these procedures or a Hearing Panel of such body as herein defined.

C. SANCTIONS.

- 1. The following sanctions may be imposed upon any student found to have violated the Student Conduct Code; more than one of the sanctions may be imposed for any single violation:
 - a. **Warning**. A notice in writing to the student that the student is violating or has violated institutional regulations.
 - b. Probation. A written reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe sanctions if the student is found to be violating any institutional regulation(s) during the probationary period.
 - c. **Loss of Privileges**. Denial of specified privileges for a designated period of time.
 - d. **Restitution**. Compensation for loss, damage, or injury to the University or University property. This may take the form of appropriate service and/or monetary or material replacement.
 - Discretionary Sanctions. Work assignments, service to the University, or other related discretionary assignments.
 - f. Residence Hall Suspension. Separation of the student from the residence halls for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified.
 - g. **Residence Hall Expulsion**. Permanent separation of the student from the residence halls.
 - h. **University Dismissal**. An involuntary separation of the student from the institution for misconduct apart from academic requirements. It does not imply or state a minimum separation time.
 - i. **University Suspension**. Separation of the student from the University for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified.
 - j. **University Expulsion**. Permanent separation of the student from the University.
- 2. **Temporary Suspension**. The Chancellor or Designee may at any time temporarily suspend or deny readmission to a student from the University pending formal procedures when the Chancellor or Designee finds and believes from available information that the presence of a student on campus would seriously disrupt the University or constitute a danger to the health, safety, or welfare of members of the University community. The appropriate procedure to determine the future status of the student will be initiated within seven calendar days.

D. RECORDS RETENTION. Student conduct records shall be maintained for five years after University action is completed.

E. POLICY AND PROCEDURES.

- Preliminary Procedures. The Primary Administrative Officer/Designee(s) shall investigate any reported student misconduct before initiating formal conduct procedures and give the student the opportunity to present a personal version of the incident or occurrence. The Primary Administrative Officer/Designee(s) may discuss with any student such alleged misconduct and the student shall attend such consultation as requested by the Primary Administrative Officer/Designee(s). The Primary Administrative Officer/Designee(s), in making an investigation and disposition, may utilize student courts and boards and/or divisional deans to make recommendations.
- 2. **Informal Disposition.** The Primary Administrative Officer/Designee(s) shall have the authority to make a determination and to impose appropriate sanctions and shall fix a reasonable time within which the student shall accept or reject

a proposed informal disposition. A failure of the student either to accept or reject within the time fixed may be deemed by the University to be an acceptance of the determination, provided the student has received written notice of the proposed determination and the result of the student's failure to formally reject and, in such event, the proposed disposition shall become final upon expiration of such time. If the student rejects informal disposition it must be in writing and shall be forwarded to the Committee. The Primary Administrative Officer/Designee(s) may refer cases to the Committee without first offering informal disposition.

3. Formal Procedure and Disposition.

- a. **Student Conduct Committee:** (1) The Committee shall be appointed by the Chancellor and shall have the authority to impose appropriate sanctions upon any student or students appearing before it.
 - (2) The Committee, when appropriate or convenient, may be divided by the Chair of the Committee into Hearing Panels, each panel to be composed of at least five Committee members, which may include a maximum of two students, present at the hearing, including a designated chair. A Hearing Panel has the authority of the whole Committee in those cases assigned to it. The Chair of the Committee or of a Hearing Panel shall count as one member of the Committee or Hearing Panel and have the same rights as other members.
 - (3) Each Chancellor shall appoint a panel of students, to be known as the Student Panel. Upon written request of a student charged before the Committee, made at least seventy-two (72) hours prior to the hearing, the Chair of the Committee or Hearing Panel shall appoint from the Student Panel not more than three students to sit with the Committee or two students to sit with the Hearing Panel (as stated in 4.a.(2)) for that particular case. When students from the Student Panel serve at the request of a student charged, they shall have the same rights as other members of the Committee or Hearing Panel.
- b. General Statement of Procedures. A student charged with a breach of the Student Conduct Code is entitled to a written notice and a formal hearing unless the matter is disposed of under the rules for informal disposition. Student conduct proceedings are not to be construed as judicial trials and need not wait for legal action before proceeding; but care shall be taken to comply as fully as possible with the spirit and intent of the procedural safeguards set forth herein. The Office of the General Counsel shall be legal adviser to the Committee and the Primary Administrative Officer/Designee(s).
- Notice. The Primary Administrative Officer/Designee(s) c. shall initiate student conduct proceedings by arranging with the Chair to call a meeting of the Committee and by giving written notice by certified mail or personal delivery to the student charged with misconduct. The notice shall set forth the date, time, and place of the alleged violation and the date, time, and place of the hearing before the Committee. Notice by certified mail may be addressed to the last address currently on record with the University. Failure by the student to have a current correct local address on record with the University shall not be construed to invalidate such notice. The notice shall be given at least seven (7) consecutive days prior to the hearing, unless a shorter time is fixed by the Chair for good cause. Any request for continuance shall be made in writing to the Chair, who shall have the authority to continue the hearing if the request is timely and made for good cause. The Chair shall notify the Primary Administrative Officer/Designee(s) and the student of the new date for the hearing. If the student fails to appear at the scheduled time, the Committee may hear and determine the matter.
- 4. **Right to Petition for Review:** (other than University expulsion, University dismissal, or University suspension)

- a. In all cases where the sanction imposed by the Committee is other than University expulsion, University dismissal, or University suspension, the Primary Administrative Officer/Designee(s) or the student may petition the Chancellor or Designee in writing for a review of the decision within five (5) calendar days after written notification. A copy of the Petition for Review must also be served upon the nonappealing party within such time. The Petition for Review shall state the grounds or reasons for review, and the nonappealing party may answer the petition within five (5) calendar days.
- b. The Chancellor or Designee may grant or refuse the right of review. In all cases where the Petition for Review is refused, the action of the Committee shall be final. If the Chancellor or Designee reviews the decision, the action of the Chancellor shall be final unless it is to remand the matter for further proceedings.
- 5. **Right of Appeal:** (University expulsion, University dismissal, or University suspension only)
 - a. When a student is expelled, dismissed, or suspended from the University by the Committee, the Primary Administrative Officer/Designee(s), or the student may appeal such decision to the Chancellor or Designee by filing written notice of appeal with the Chancellor within ten (10) calendar days after notification of the decision of the Committee. A copy of the Notice of Appeal will contemporaneously be given by the student to the Primary Administrative Officer/Designee(s) or by the Primary Administrative Officer/Designee(s) to the student. The appealing party may file a written memorandum for consideration by the Chancellor with the Notice of Appeal, and the Chancellor may request a reply to such memorandum by the appropriate party.
 - b. The Chancellor or Designee shall review the record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify each party in writing of the decision on the appeal. The action of the Chancellor shall be final unless it is to remand the matter for further proceedings.
- 6. **Status During Appeal.** In cases of suspension, dismissal, or expulsion where a Notice of Appeal is filed within the required time, a student may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit a student to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not seriously disrupt the University or constitute a danger to the health, safety, or welfare of members of the University community. In such event, however, any final sanctions imposed shall be effective from the date of the action of the Committee.
- 7. Student Honor System. Forums under the student honor systems established for investigating facts, holding hearings, and recommending and imposing sanctions are authorized when the student honor code or other regulations containing well defined jurisdictional statements and satisfying the requirements of Section 10.030, which is Article V of the Bylaws of the Board of Curators, have been reduced to writing and have been approved by the Chancellor and the Board of Curators and notice thereof in writing has been furnished to students subject thereto. Though the student honor system has jurisdiction, together with procedures set forth therein, instead of the Primary Administrative Officer/Designee(s), the standard of conduct called for in any such student honor system shall be deemed to contain at a minimum the same standards set forth in Section 200.010, entitled Standards of Conduct. Procedures shall satisfy the requirements of the Board of Curators' Bylaws, Section 10.030, which is Article V, and shall contain procedures herein before stated insofar as appropriate and adaptable to the particular situation and shall be approved by the Chancellor and the General Counsel. Students subject to student honor systems shall have the rights of appeal as set forth in Section 200.020 E.6 and 7.

F. Hearing Procedures.

- 1. **Conduct of Hearing.** The Chair shall preside at the hearing, call the hearing to order, call the roll of the Committee in attendance, ascertain the presence or absence of the student charged with misconduct, read the notice of hearing and charges and verify the receipt of notices of charges by the student, report any continuances requested or granted, establish the presence of any adviser or counselor of the student, and call to the attention of the student charged and the adviser any special or extraordinary procedures to be employed during the hearing and permit the student to make suggestions regarding or objections to any procedures for the Conduct Committee to consider.
 - a. **Opening Statements.**
 - (1) The Primary Administrative Officer/Designee(s) shall make opening remarks outlining the general nature of the case and testify to any facts the investigation has revealed.
 - (2) The student may make a statement to the Committee about the charge at this time or at the conclusion of the University's presentation.

b. University Evidence.

- (1) University witnesses are to be called and identified or written reports of evidence introduced as appropriate.
- (2) The Committee may question witnesses at any time.
 (3) The student or, with permission of the Committee, the adviser or counselor may question witnesses or examine evidence at the conclusion of the University's presentation.
- c. Student Evidence.
 - (1) If the student has not elected to make a statement earlier under a. (2) above, the student shall have the opportunity to make a statement to the Committee about the charge.
 - (2) The student may present evidence through witnesses or in the form of written memoranda.
 - (3) The Committee may question the student or witnesses at any time. The Primary Administrative Officer/Designee(s) may question the student or witnesses.
- d. **Rebuttal Evidence.** The Committee may permit the University or the student to offer a rebuttal of the other's presentation.
- e. **Rights of Student Conduct Committee.** The Committee shall have the right to:
 - Hear together cases involving more than one student which arise out of the same transaction or occurrence, but in that event shall make separate findings and determinations for each student;
 - (2) Permit a stipulation of facts by the Primary Administrative Officer/Designee(s) and the student involved;
 - (3) Permit the incorporation in the record by reference of any documentation, produced and desired in the record by the University or the student charged;
 - (4) Question witnesses or challenge other evidence introduced by either the University or the student at any time;
 - (5) Hear from the Primary Administrative Officer/Designee(s) about dispositions made in similar cases and any dispositions offered to the student appearing before the Committee;
 - (6) Call additional witnesses or require additional investigation;
 - (7) Dismiss any action at any time or permit informal disposition as otherwise provided;
 - (8) Permit or require at any time amendment of the Notice of Hearing to include new or additional matters which may come to the attention of the Committee before final determination of the case; provided, however, that in such event the Committee shall grant to the student or Primary Administrative Officer/Designee(s) such time as the Committee may determine reasonable under the circumstances to answer or explain such additional matters;

- (9) Dismiss any person from the hearing who interferes with or obstructs the hearing or fails to abide by the rulings of the Chair of the Committee;
- (10) Suspend summarily students from the University who, during the hearing, obstruct or interfere with the course of the hearing or fail to abide by the ruling of the Chair of the Committee on any procedural question or request of the Chair for order.
- 2. **Student's Rights Upon Hearing.** A student appearing before a Committee shall have the right to:
 - a. Be present at the hearing;
 - b. Have an adviser or counselor and to consult with such adviser or counselor during the hearing;
 - c. Have students from the Student Panel sit with the Committee or Hearing Panel;
 - d. Hear or examine evidence presented to the Committee;
 - e. Question witnesses present and testifying;
 - f. Present evidence by witnesses or affidavit;
 - g. Make any statement to the Committee in mitigation or explanation of the conduct in question;
 - h. Be informed in writing of the findings of the Committee and any sanctions it imposes; and
 - i. Request review or appeal to the Chancellor as herein provided.
- 3. **Determination by Student Conduct Committee.** The Committee shall then make its findings and determinations in executive session out of the presence of the Primary Administrative Officer/Designee(s) and the student charged. Separate findings are to be made:
 - a. As to the conduct of the student, and
 - b. On the sanctions, if any, to be imposed. No sanctions shall be imposed on the student unless a majority of the Committee present is reasonably convinced by the evidence that the student has committed the violation charged.
- 4. **Official Report of Findings and Determinations.** The Committee shall promptly consider the case on the merits and make its findings and determination and transmit them to the Primary Administrative Officer/Designee(s) and the student charged forthwith.
- 5. Other Procedural Questions. Procedural questions which arise during the hearing not covered by these general rules shall be determined by the Chair, whose ruling shall be final unless the Chair shall present the question to the Committee at the request of a member of the Committee, in which event the ruling of the Committee by majority vote shall be final.
- 6. General Rules of Decorum. The following general rules of decorum shall be adhered to:
 - a. All requests to address the Committee shall be addressed to the Chair.
 - b. The Chair will rule on all requests and points of order and may consult with Committee's legal adviser prior to any ruling. The Chair's ruling shall be final and all participants shall abide thereby, unless the Chair shall present the question to the Committee at the request of a member of the Committee, in which event the ruling of the Committee by majority vote shall be final.
 - c. Rules of common courtesy and decency shall be observed at all times.
 - d. An adviser or counselor may be permitted to address the Committee at the discretion of the Committee. An adviser or counselor may request clarification of a procedural matter or object on the basis of procedure at any time by addressing the Chair after recognition.
- 7. **Record of Hearing.** A taped or stenographic record of the hearing shall be maintained. The notice, exhibits, hearing record, and the findings and determination of the Committee shall become the "Record of the Case" and shall be filed in the Office of the Primary Administrative Officer/Designee(s) and for the purpose of review or appeal be accessible at reasonable times and places to both the University and the student.
- 8. Crimes of Violence and Non-Forcible Sex Offences. In cases of alleged crimes of violence and non-forcible sex offences:

- The alleged victim is entitled to have an adviser or counselor present during his or her participation in the hearing.
- b. The alleged victim and the accused shall be informed of the outcome of any campus disciplinary proceeding brought alleging a crime of violence or non-forcible sexual assault.

Attendance Policy

General Principles

- Students are expected to attend and participate in classes.
- Advance notice of attendance policies of academic units and individual instructors should be given, and such notice should be in writing.
- Students should notify instructors of excused absences in advance, where possible.
- Students who have an excused absence are expected to make arrangements with instructors for alternative or make-up work. Such arrangements should be made in advance of the absence, where possible.
- Instructors should accommodate excused absences to the extent that an accommodation can be made that does not unreasonably interfere with the learning objectives of the course or unduly burden the instructor.
- Attendance policies shall be applied in a non-discriminatory manner.

The Policy

Each academic unit and instructor may adopt an attendance policy appropriate to that unit, a particular field of study, or for a specific course. Such policy or policies must be consistent with the general principles, and must give students advance notice in writing. In the case of an academic unit, notice may be given in the appropriate section of the General Catalog, or in other materials provided to students for the purpose of informing them of the rules and regulations of the academic unit. In the case of an individual instructor, notice of an attendance policy should be given in the course syllabus.

If neither the academic unit nor the instructor has adopted an attendance policy, or if proper advance notice of the attendance policy was not given, the UMKC general attendance policy will govern. The general attendance policy is that students shall not be penalized for excused absences. "Excused absences" include absences due to illness of the student, illness of an immediate family member for whom the student must care, death of an immediate family member, religious observance (where the nature of the observance prevents the student from being present during class), representation of UMKC in an official capacity, and other compelling circumstances beyond the student's control. Students seeking an excused absence must provide documentation upon request to substantiate the excuse. Students with excused absences shall undertake appropriate make-up or alternative work to be provided by instructors of the courses in which excused absences were incurred.

Complaints concerning the application of an attendance policy or an instructor's attendance policy should be raised with the Department Chair of the instructor, or with the Dean if there is no Department Chair or the instructor is the Department Chair. If the student or instructor is not satisfied with the resolution of the complaint, the matter may be appealed to the Dean and to the Division of Academic Affairs. Complaints concerning the adoption or modification of an attendance policy by an academic unit should be raised with the Division of Academic Affairs. Complaints are to be promptly addressed at each level of review.

This policy was approved July, 2002 and effective Fall, 2002.

Acceptable Use Policy

(110.005 Acceptable Use Policy; Bd. Min. 9-14-00.)

This policy is also available at

http://www.umsystem.edu/uminfo/rules/facilities/110005.htm.

This policy applies to all users including faculty, staff, students, and guest users of University of Missouri computer networks, equipment, or connecting resources.

A. UNIVERSITY INSPECTION OF PERSONAL

ELECTRONIC INFORMATION – Electronic information on University networks or equipment, including, but not limited to, electronic mail and personal information, is subject to examination by the University where:

- 1. It is necessary to maintain or improve the functioning of University computing resources;
- 2. Where there is a suspicion of misconduct under University policies, or suspicion of violation of Federal or State laws; or
- 3. It is necessary to comply with or verify compliance with Federal or State law.

B. ACCEPTABLE USE GUIDELINES

- Responsibilities of Users of University Computer Resources:
 a. Respect the intellectual property rights of authors,
 - contributors, and publishers in all media.b. Protect user ID, password, and system from unauthorized use.
 - c. Adhere to the terms of software licenses and other contracts. Persons loading software on any University computer must adhere to all licensing requirements for the software. Except where allowed by University site licenses, copying software licensed for University use for personal use is a violation of this policy.
 - d. Adhere to other University and campus policies, including the Collected Rules and Regulations of the University of Missouri, and, if applicable, the University Business Policy Manual, Human Resources Manual and policies established for a specific resource.
 - e. Adhere to data access policies of the University or those established by law.
 - f. Use University computer resources in a manner that is compliant with University policies and State and Federal law.
- 2. Prohibited Uses of University Computer Resources:
 - a. Unauthorized or excessive personal use. Use may be excessive if it overburdens a network, results in substantial use of system capacity, or otherwise subjects the institution to increased costs or risks (employees additionally may be subject to discipline for unauthorized or excessive personal use of computer resources).
 - b. Uses that interfere with the proper functioning of the University's information technology resources.
 - c. Uses that unreasonably interfere with the ability of others to make use of University computer resources.
 - Attempting to gain or gaining unauthorized access to the computer system, or files of another.
 - e. Use of University computer resources to infringe the intellectual property rights of others.
 - f. Use of University computer resources for personal profit, except as permitted under the University's conflict of interest policy.

C. ENFORCEMENT OF ACCEPTABLE USE POLICY -

Violation of the Acceptable Use Policy may result in a denial of access to University computer resources, and those disciplinary actions provided or authorized by the Collected Rules and Regulations of the University of Missouri.

Students who violate these guidelines will be subject to sanctions as outlined in section 200.010 of the Student Conduct Code. All such cases will be forwarded to the Primary Administrative Officer in the Student Life Office for appropriate action.

Faculty or staff who violate these guidelines will be subject to disciplinary measures as outlined within the University Policy Manuals.

Violations of some of the above guidelines may constitute a criminal offense. Individuals using UMKC computing resources are urged to review the University Policy Manual, Computer Crimes Bill passed by the Missouri State Legislature and the MOREnet Acceptable Use Policy, all of which are stored on-line for easy access.

Policy on Student Records

(180.020 Student Records; Bd. Min. 2-28-75; Amended 3-18-77; Bd. Min. 6-10-59, p. 15,059; Bd. Min. 5-24-01.)

This policy is also available at http://www.umsystem.edu/uminfo/rules/information/180020.htm.

A. PURPOSE. The purpose of this regulation is to set forth the guidelines governing the protection of the privacy of student records and to implement The Family Educational Rights and Privacy Act of 1974 (Buckley Amendment; Pub. L. 93-380, as amended). These regulations apply to all students who are or have attended the University of Missouri.

B. DEFINITIONS.

- 1. **"Act"** means the Family Educational Rights and Privacy Act of 1974, as amended, enacted as Section 444 of the General Education Provisions Act.
- 2. "Attendance" at the University includes, but is not limited to:
 - a. The period of time during which a student attends the University. Examples of dates of attendance include an academic year, a spring semester, or a first quarter.
 - b. The term does not include specific daily records of a student's attendance at the University.
- "Directory Information/Public Information" includes a student's name, address, e-mail address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, the most recent previous educational agency or institution attended by the student, student level, and full- or part-time status.
 "Disclosure" means to permit access to or the release, transfer,
- 4. "Disclosure" means to permit access to or the release, transfer, or other communication of personally identifiable information contained in education records to any party, by any means, including oral, written, or electronic means.

5. "Education Records"

a.

- The term means those records that are:
- (1) Directly related to a student; and(2) Maintained by the University or by a party acting for the University.
- b. The term does not include:
 - Records that are kept in the sole possession of the maker of the record, and are not accessible or revealed to any other person except a temporary substitute for the maker of the record;
 - (2) Records of a law enforcement unit of the University, but only if education records maintained by the University are not disclosed to the unit, and the law enforcement records are:
 - (a) Maintained separately from education records;(b) Maintained solely for law enforcement
 - purposes; and (c) Disclosed only to law enforcement officials of the same jurisdiction;
 - (3)
 - (i) Records relating to an individual who is employed by the University, that:
 (a) Are made and maintained in the normal couse of business;
 (b) Relate exclusively to the individual in that individual's capacity as an employee; and
 (c) Are not available for use for any other purpose.
 - (ii) Records relating to an individual in attendance at the University who is employed as a result of his or her status as a student are education records and not excepted under Section 180.020 B.5.b (3) of this definition.
 - (4) Records on a student who is attending the University, that are:
 - (a) Made or maintained by a physician, phychiatrist, psychologist, or other recognized professional or paraprofessional acting in his or her professional capacity or assisting in a paraprofessional capacity;

- (b) Made, maintained, or used only in connection with treatment of the student; and
- (c) Disclosed only to individuals providing the treatment. For the purpose of this definition, "treatment" does not include remedial educational activities or activities that are part of the program of instruction at the University; and
- (5) Records that only contain information about an individual after he or she is no longer a student at the University.
- 6. "Parent" means a natural parent, an adoptive parent or the legal guardian of the student. "Party" means an individual, agency, institution or
- 7 organization.
- "Personally identifiable information," includes: 8.
 - The student's name;
 - The name of the student's parent or other family member; b.
 - The address of the student or student's family; c.
 - A personal identifier, such as the student's social security d. number or student number;
 - A list of personal characteristics that would make the e. student's identity easily traceable; or
 - Other information that would make the student's identity f. easily traceable.
- 9. "Record" means information or data recorded in any medium, including, but not limited to handwriting, print, computer media, video or audio tape, film, microfilm, and microfiche.
- 10. "Student" means any person who is or has been in attendance at the University where the University maintains education records or personally identifiable information on such person. However, the term does not include a person who has not been in
- attendance at the University of Missouri. 11. **"University Official"** is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

C. NOTIFICATION OF ACCESS RIGHTS BY THE UNIVERSITY.

- 1. The University shall annually notify students currently in attendance of their rights under the Act.
- 2. Notice must be included in each campus' information manual, or other publication, and must inform students that they have the right to:
 - a. Inspect and review the student's education records;
 - Seek amendment of the student's education records that b. the student believes to be inaccurate, misleading, or otherwise in violation of the student's privacy rights;
 - c. Consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that the Act and Section 180.020 M authorize disclosure without consent; and
 - File with the Department of Education's Family Policy d. Compliance Office a complaint under Sections 99.63 and 99.64 of the Act concerning alleged failures by the University to comply with the requirements of the Act.
- 3. The notice must include all of the following:
 - The procedure for exercising the right to inspect and a. review education records;
 - The procedure for requesting amendment of records under h Section 180.020 I; and
 - A specification of criteria for determining who constitutes c. a school official and what constitutes a legitmate educational interest, as listed in Section 180.020 M.1.a.
- 4. The University may provide this notice by any means that are reasonably likely to inform the students of their rights. The University shall effectively notify students who are disabled.

D. RECORDS OF THE UNIVERSITY'S LAW ENFORCEMENT UNIT.

- 1. "Law enforcement unit" means any individual, office, department, division or other component of the University, such as the University of Missouri Police Department or noncommissioned security guards, that is officially authorized or designed by the University to:
 - a. Enforce any local, state or federal law, or refer to appropriate authorities a matter for enforcement of any local, state or federal law against any individual or organization other than the University itself: or
 - Maintain the physical security and safety of the University. h
- 2. A component of the University does not lose its status as a "law enforcement unit" if it also performs other, non-law enforcement functions for the University, including investigation of incidents or conduct that constitutes or leads to a disciplinary action or proceedings against the student.
- 3. "Records of law enforcement unit" means those records, files, documents, and other materials that are:
 - Created by a law enforcement unit; a.
 - Created for a law enforcement purpose; and b.
 - Maintained by the law enforcement unit. с.
- 4. "Records of law enforcement unit" does not mean:
 - Records created by a law enforcement unit for a law a. enforcement purpose that are maintained by a component of the University other than the law enforcement unit; or
 - b. Records created and maintained by a law enforcement unit exclusively for a non-law enforcement purpose, such as disciplinary action or proceeding conducted by the University.
- 5. The University may contact its law enforcement unit, orally or in writing, for the purpose of asking that unit to investigate a possible violation of, or to enforce, any local, state or federal law.
- 6. Education records, and personally identifiable information contained in education records, do not lose their status as education records and remain subject to the Act, as well as the disclosure provisions of Section 180.020 L, while in possession of the law enforcement unit.

E. RIGHTS OF INSPECTION AND REVIEW OF EDUCATION RECORDS.

- 1. The University shall provide students access to their educational records except as provided in Section 180.020 G.
- The University shall comply with a request within a reasonable period of time, but in no case more than 45 days after the request has been received.
- 3. The University shall respond to reasonable requests for explanations and interpretations of those records.
- 4. If circumstances effectively prevent the student from exercising the right to inspect and review the student's education records, the University shall:
 - Provide the student with a copy of the records requested; or a. b. Make other arrangements for the student to inspect and
 - review the requested records.
- 5. The University shall not destroy any education records if there is an outstanding request to inspect and review the records under this section.

F. FEES FOR COPIES OF EDUCATIONAL RECORDS.

- 1. Unless the imposition of a fee effectively prevents a student from exercising the right to inspect and review the student's education records, the University may impose a reasonable fee for reproduction costs. This fee will not exceed the actual cost of production.
- 2 The University shall not charge a fee to search for or to retrieve the education records of a student.

G. LIMITATION ON ACCESS.

- 1. If the education records of a student contain information on more than one student, the student may inspect and review or be informed of only the specific information about that student.
- 2. The University will not permit a student to inspect and review education records that are:

- Financial records, including any information those records a. contain, of his or her parents;
- Confidential letters and confidential statements of b. recommendation placed in the education records of the student before January 1, 1975, as long as the statements are used only for the purposes for which they were specifically intended; and
- c. Confidential letters and confidential statements of recommendation placed in the student's education records after January 1, 1975, if:
 - (1) The student has waived his or her right to inspect and review those letters and statements; and
 - (2) Those letters and statements are related to the student's:
 - (a) Admission to the University;
 - (b) Application for employment; or
 - (c) Receipt of an honor or honorary recognition.

H. WAIVERS.

- 1. A waiver under Section 180.020 G is valid only if:
 - a. The University does not require the waiver as a condition for admission to or receipt of a service or benefit from the University: and
 - b. The waiver is made in writing and signed by the student, regardless of age.
- 2. If a student has waived his or her rights under Section 180.020 G, the University shall:
 - a. Give the student, on request, the names of the individuals who provided the letters and statements of recommendation; and
 - Use the letters and statements of recommendation only for b. the purpose for which they were intended.
- 3. A waiver under Section 180.020 G may be revoked with respect to any actions occurring after the revocation. A revocation must be in writing.

I. AMENDMENT OF EDUCATION RECORDS.

- 1. If a student believes the education records relating to the student contain information that is inaccurate, misleading, or in violation of the student's rights of privacy, he or she may ask the University to amend the record by contacting the University Registrar.
- 2. The University shall decide whether to amend the record as requested within a reasonable time after the request is received.
- 3. If the University decides not to amend the record as requested, the University Registrar shall inform the student of its decision and of his or her right to a hearing under Section 180.020 J.

J. RIGHTS TO A HEARING.

- 1. The University shall give a student, on request, an opportunity for a hearing to challenge the content of the student's education records on the grounds that the information contained in the education records is in violation of the privacy rights of the student.
- 2. If, as a result of the hearing, the University decides that the information is inaccurate, misleading, or otherwise in violation of the privacy rights of the student, it shall:
 - a. Amend the record accordingly; and
 - b. Inform the student of the amendment in writing.
- 3. If, as a result of the hearing, the University decides that the information in the education record is not inaccurate, misleading, or otherwise in violation of the privacy rights of the student, it shall inform the student of the right to place a statement in the record commenting on the contested information in the record or stating why he or she disagrees with the decision of the University, or both.
- 4. If the University places a statement in the education records of a student, it shall:
 - a. Maintain the statement with the contested part of the record for as long as the record is maintained; and
 - Disclose the statement whenever it discloses the portion of b. the record to which the statement relates.

K. CONDUCT OF A HEARING. Upon the request of the University official charged with custody of the records of the student, the hearing required by Section 180.020 J shall be conducted.

- 1. The request for a hearing shall be submitted in writing to the campus Chancellor, who will appoint a hearing officer or a hearing committee to conduct the hearing.
- 2. The hearing shall be conducted and decided within a reasonable period of time following the request for the hearing. The University shall give the student notice of the date, time, and place, reasonably in advance of the hearing.
- 3. The hearing shall be conducted and the decision rendered by an appointed hearing official or officials who shall not have a direct interest in the outcome of the hearing.
- 4. The student shall be afforded a full and fair opportunity to present evidence relevant to the hearing, and may be assisted or represented by individuals of his or her choice at his or her own expense, including an attorney.
- 5. The decision of the University shall be based solely upon the evidence presented at the hearing and shall include a summary of the evidence and the reasons for the decision.
- 6. The decision shall be rendered in writing within a reasonable period of time after the conclusion of the hearing.
- Either party may appeal the decision of the hearing official or officials to the campus Chancellor.

L. CONDITIONS UNDER WHICH PRIOR CONSENT IS **REQUIRED.**

- 1. The student shall provide a signed and dated written consent before the University discloses personally identifiable information from the student's education records, except as provided in Section 180.020 M. 2. The written consent must:
- - Specify the records that may be disclosed; a.
 - State the purpose of the disclosure; and b.
 - Identify the party or class of parties to whom the c. disclosure may be made.
- 3. If a student so requests, the University shall provide him or her with a copy of the records disclosed.

M. CONDITIONS UNDER WHICH PRIOR CONSENT IS NOT **REQUIRED.**

- 1. The University may disclose personally identifiable information from an education record of a student without the consent required by Section 180.020 L if the disclosure meets one or more of the following conditions:
 - The disclosure is to other University officials, including a. teachers, within the University who have been determined by the University to have legitimate educational interests. A University official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
 - b. The disclosure is to officials of other schools or school systems in which the student seeks or intends to enroll, upon condition that the student is notified of the transfer, receives a copy of the record if requested, and has an opportunity for a hearing to challenge the content of the record.
 - The disclosure is, subject to the requirements of Section c. 180.020 P, to authorized representatives of:
 - (1) The Comptroller General of the United States;
 - (2) The Attorney General of the United States;
 - (3) The Secretary; or
 - (4) State and local educational authorities.
 - The disclosure is in connection with financial aid defined d. as a payment of funds provided to an individual (or a payment in kind of tangible or intangible property to the individual) that is conditioned on the individual's attendance at the University - for which the student has applied or which the student has received, if the information is necessary for such purposes as to:
 - (1) Determine eligibility for the aid;
 - (2) Determine the amount of the aid;
 - (3) Determine the conditions for the aid; or
 - (4) Enforce the terms and conditions of the aid.
 - The disclosure is to state and local officials or authorities to which such information is specifically required to be reported or disclosed pursuant to a state statute adopted prior to November 19, 1974.

- f. The disclosure is to organizations conducting studies for, or on behalf of, educational agencies or institutions to develop, validate, or administer predictive tests, administer student aid programs, or improve instruction. Such studies are to be conducted in such a manner as will not permit the personal identification of students or their parents by persons other than representatives of the organization, and this information will be destroyed when no longer needed for the purpose for which the study is conducted.
- g. The disclosure is to accrediting organizations to carry out their accrediting functions.
- h. The disclosure is to parents of a dependent student, as defined in Section 152 of the Internal Revenue Code of 1986, as amended.
- i. The disclosure is to comply with a lawfully issued subpoena.
 - subpoena.
 (1) The University may disclose this information only if it makes a reasonable effort to notify the student of the order or subpoena in advance of compliance, so that the student may seek protective action, unless the disclosure is in compliance with
 - the disclosure is in compliance with –
 (a) A federal grand jury subpoena and the court has ordered that the existence or the contents of the subpoena or the information furnished in response to the subpoena not be disclosed; or
 - (b) Any other subpoena issued for a law enforcement purpose and the court or other issuing agency has ordered that the existence or the contents of the subpoena or the information furnished in response to the subpoena not be disclosed.
 - (2) If the University initiates legal action against a parent or student, the University may disclose to the court, without a court order or subpoena, the education records of the student that are relevant for the University to process with the legal action as plaintiff.
 - (3) If a parent or eligible student initiates legal action against the University, the University may disclose to the court, without a court order or subpoena, the student's education records that are relevant for the University to defend itself.
- j. The disclosure is in connection with a health or safety emergency, under the conditions described in Section 180.020 Q.
- k. The disclosure is information the University has designated as "**directory information**," under the conditions described in Section 180.020 R.
- 1. The disclosure is to the student.
- m. The disclosure, subject to the requirements in Section 180.020 S, is to a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense. The disclosure may include only the final results of the disciplinary proceeding conducted by the University with respect to that alleged crime or offense. The University may disclose the final results of the disciplinary proceeding, regardless of whether the University concluded a violation was committed.
- n.
- (i) The disclosure, subject to the requirements in Section 180.020 S, is in connection with a disciplinary proceeding at the University providing that the University determines that:
 - (1) The student is an alleged perpetrator of a crime of violence or non-forcible sex offense; and
 - (2) With respect to the allegation made against him or her, the student has committed the violation of the University's rules or policies.
- (ii) The University may not disclose the name of any other student, including a victim or witness, without the prior written consent of the other student.
- (iii) This section applies only to disciplinary proceedings in which the final results were reached on or after October 7, 1998.
- o. The disclosure is to a parent of a student under the age of twenty-one at the time of disclosure, and is limited to a

determination that the student violated University regulations pertaining to the use or possession of alcohol or a controlled substance, as provided by and under the restrictions contained in Section 180.025.

N. RECORD KEEPING.

- 1. The University shall maintain a record of each request for access to and each disclosure of personally identifiable information from the education records of each student, for as long as the records are maintained.
- 2. For each request or disclosure the record must include:
 - a. The parties who have requested or received personally identifiable information from the education records; and
 - b. The legitimate interests the parties had in requesting or obtaining the information.
- 3. If the University discloses personally identifiable information from an education record with the understanding authorized under Section 180.020 O.2, the record of the disclosure required under this section must include:
 - a. The names of the additional parties to which the receiving party may disclose the information on behalf of the University; and
 - b. The legitimate interests under Section 180.020 M which each of the additional parties has in requesting or obtaining the information.
- 4. The following parties may inspect the record relating to each student:
 - a. The student;
 - b. The school official or his or her assistants who are responsible for the custody of the records; and
 - c. Those parties authorized in Section 180.020 M.1.a and M.1.c for the purposes of auditing the record keeping procedures of the University.
- 5. Paragraph 1 of this section does not apply if the request was from, or the disclosure was to:
 - a. The student;
 - b. A University official under Section 180.020 M.1.a;
 - c. A party with written consent from the student;
 - d. A party seeking directory information; or
 - e. A party seeking or receiving the records as directed by a federal grand jury or other law enforcement subpoena and the issuing court or other issuing agency has ordered that the existence or the contents of the subpoena or the information furnished in response to the subpoena not be disclosed.

O. LIMITATIONS TO THE REDISCLOSURE OF INFORMATION.

- 1. The University may disclose personally identifiable information from an education record only on the condition that the party to whom the information is disclosed will not disclose the information to any other party without the prior consent of the student. The officers, employees, and agents of a party that receives information may use the information, but only for the purposes for which the disclosure was made.
- 2. This does not prevent the University from disclosing personally identifiable information with the understanding that the party receiving the information may make further disclosures of the information on behalf of the University if:
 - a. The disclosures meet the requirements of Section 180.020 M; and
 - b. The University has complied with the requirements of Section 180.020 N.3.
- 3. Section 180.020 O.1 does not apply to disclosures made pursuant to court orders, lawfully issued subpoenas, litigation under Section 180.020 M.1.i, to disclosures of directory information under Section 180.020 M.1.k, to disclosures made to a parent or student under Section 180.020 M.1.j, to disclosures made in connection with a disciplinary proceeding under Section 180.020 M.1.n, or to disclosures made to parents under Section 180.025.
- 4. Except for disclosures under Section 180.020 M.1.k, l, m, and n, the University shall inform a party to whom disclosure is made of the requirements of this section.

5. If the University determines that a third party improperly rediscloses personally identifiable information from education records in violation of Section 180.020 O.1, the University may not allow that third party access to personally identifiable information from education records for at least five years.

P. DISCLOSURE OF INFORMATION FOR FEDERAL OR STATE PROGRAM PURPOSES.

- 1. The officials listed in Section 180.020 M.1.c may have access to education records in connection with an audit or evaluation of federal or state supported education programs, or for the enforcement of or compliance with federal legal requirements which relate to those programs.
- 2. This information must:
 - a. Be protected in a manner that does not permit personal identification of individuals by anyone except the officials referred to in part 1 of this section; and
 - b. Be destroyed when no longer needed for the purposes listed in part 1 of this section.
- 3. Part 2 of this section does not apply if:
 - a. The student has given written consent for the disclosure under Section 180.020 L; or
 - b. The collection of personally identifiable information is specifically authorized by Federal law.

Q. RELEASE OF INFORMATION FOR HEALTH OR SAFETY EMERGENCIES. The University may release information from an

education record to appropriate persons in connection with an emergency if the knowledge of such information is necessary to protect the health or safety of a student or other persons. The factors which will be taken into account in determining whether the records may be released under this section include the following:

- 1. The seriousness of the threat to the health or safety of the student or other persons;
- 2. The need for such records to meet the emergency;
- Whether the persons to whom such records are released are in a position to deal with the emergency; and
 The extent to which time is of the essence in dealing with the
- 4. The extent to which time is of the essence in dealing with the emergency.

R. CONDITIONS FOR DISCLOSURE OF DIRECTORY INFORMATION.

- 1. The University may disclose directory information if it has given public notice to students in attendance at the University of:
 - a. The types of personally identifiable information that the University has designated as directory information;
 - b. A student's right to refuse to let the University designate any or all of those types of information about the student as directory information; and
 - c. The period of time within which a student has to notify the University in writing that he or she does not want any or all of those types of information about the student designated as directory information.
- 2. The University may disclose directory information about former students without meeting the conditions of this section.

S. DEFINITIONS APPLYING TO THE NONCONSENSUAL DISCLOSURE OF RECORDS IN CONNECTION WITH DISCIPLINARY PROCEEDINGS CONCERNING CRIMES OF VIOLENCE OR NON-FORCIBLE SEX OFFENSES. As used in this part:

- 1. **"Alleged perpetrator of a crime of violence"** is a student who is alleged to have committed acts that would, if proven, constitute any of the following offenses or attempts to commit the following offenses that are defined in Title 18, **"Crimes and Criminal Procedure,"** of the United States Code:
 - a. Arson;
 - b. Assault offenses;
 - c. Burglary;
 - d. Criminal homicide manslaughter by negligence;
 - Criminal homicide murder and nonnegligent manslaughter;
 - f. Destruction/damage/vandalism of property;
 - g. Kidnapping/abduction;
 - h. Robbery; or
 - i. Forcible sex offenses.

- 2. "Alleged perpetrator of non-forcible sex offense" means a student who is alleged to have committed acts that, if proven, would constitute statutory rape or incest. These offenses are defined in Title 18, "Crimes and Criminal Procedure," of the United States Code.
- 3. "Final results" means a decision or determination, made by an honor court or council, committee, commission, or other entity authorized to resolve disciplinary matters within the University. The disclosure of final results must include only the name of the student, the violation committed, and any sanction imposed by the University against the student.
- 4. **"Sanction imposed"** means a description of the disciplinary action taken by the University, the date of its imposition, and its duration.
- "Violation committed" means the University rules or code sections that were violated and any essential finding supporting the University's conclusion that the violation was committed.

Procedure for Appeal of Grades

Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the instructor.

This grade appeal procedure is available only for the review of allegedly capricious grading and not for review of the instructor's evaluation of the student's academic performance. Capricious grading, as that term is used here, comprises any of the following:

- The assignment of a grade to a particular student on some basis other than the performance in the course;
- The assignment of a grade to a particular student according to more exacting or demanding standards than were applied to other students in the course; (Note: Additional or different grading criteria may be applied to graduate students enrolled for graduate credit in 300- and 400-level courses.)
- graduate credit in 300- and 400-level courses.)
 The assignment of a grade by a substantial departure from the instructor's previously announced standards.

Appeal Procedures

- 1. The student should first discuss the course grade fully with the instructor of the course. This must be done within six weeks after the beginning of the succeeding regular academic semester.
- 2. If the matter cannot be resolved by consultation with the instructor, the student should use the departmental grade-appeal procedure. Every academic unit (school, College or department) must have a set of appeal procedures that are to be made available to students on request. These procedures will specify the manner in which the departmental review of the challenged grade will be conducted.
- 3. If the matter is not resolved at the departmental level, an appeal can be made to the academic dean, in accordance with the school's or College's appeals process. The decision of the dean will be communicated to the student, the instructor and the department.
- 4. If the matter is not resolved within the school or College, the student may appeal to the chancellor or designated representative. This appeal must be made within 10 consecutive calendar days after notification of the decision of the dean.
- 5. The chancellor or designated representative shall review the full record of the case and appeal documents. At this level, the chancellor may appoint an ad hoc academic appeals committee to review the record and provide advice on the matter. The decision of the chancellor, or designated representative, is final and will be communicated to the student, the instructor, the department and the dean of the school or College.

Academic Amnesty Policy

The University of Missouri-Kansas City has an Amnesty policy to enable those students who did not perform adequately in their undergraduate enrollment at UMKC to be given a second chance to pursue their academic goals. The policy is as follows:

I. A student may apply or petition for amnesty if she or he meets the following requirements:

- 1. Has not been enrolled at UMKC at any time during the past two years.
- 2. Applies for readmission at UMKC and applies for academic amnesty at the same time or applies for amnesty before the end of the first semester of re-enrollment.

Note: Amnesty will not be considered for students who are concurrently enrolled or who intend to enroll at colleges and universities other than UMKC.

II. Academic Amnesty will be implemented as follows:

- Grades for all UMKC courses taken in the semester or semesters for which amnesty is requested will be marked if the request is approved. The student may not choose specific courses to be included, leaving other courses with an unmarked original grade.
- 2. The original grade will remain on the student's record, but will be marked by an "x" preceding the grade. For plus/minus grades, the plus or minus will be dropped and the base grade will be used. For example, grades of A, B+, B, B-...F will be changed to XA, XB,XF. These hours and grades will remain on the transcript, but will not count toward cumulative hours nor GPA, nor can they be used to fulfill any degree requirements, regardless of the original grade.
- A statement "Grades granted amnesty by faculty committee action" (or similar) will follow the courses granted amnesty.
- 4. The change to the transcript will be processed within 30 days following an approved petition for amnesty but in no case sooner than the end of the fourth week of classes in the first term in which the student re-enrolls. If the student then withdraws before grades are awarded at the end of that term the grades will be returned to the original grades.
- 5. Students can receive amnesty only one time.

Academic Amnesty Procedures

- Application may be made by use of a standard application form available online at www.umkc.edu/registrar/forms.html or by any written document or letter which contains the necessary information (see form). Applications should be submitted to the UMKC Records Office, to the attention of the Assistant Registrar-Records, prior to the first day of classes in the student's second semester of readmission.
- 2. Amnesty applications are acted upon by a standing faculty committee to be appointed by the Provost's Office.
- 3. Notification of committee decisions will be made in writing to the student and the appropriate Academic Deans by the UMKC Records Office.

Equal Opportunity Procedures

Guidelines on Sex Discrimination

The University of Missouri-Kansas City complies with Title IX of the Educational Amendment of 1972 which ensures that all employees and students are not victims of sex discrimination. To ensure compliance with this policy of nondiscrimination on the basis of sex, the University has taken the following steps:

- 1. The University recruits employees of both sexes for all jobs except where sex is a bona fide occupational qualification.
- 2. Advertisements in journals, newspapers and other media for employment do not express a sexual preference unless sex is a bona fide occupational qualification for the position.
- 3. Personnel policies for the University explicitly state that there will be no discrimination on account of sex.
- 4. Promotion and job advancement opportunities except where governed by the rules and regulations of tenure are afforded to all employees regardless of sex. The University makes no distinction based upon sex in employment opportunities, wages, hours or other conditions of employment.
- 5. Policies and practices of the University assure that appropriate physical facilities are available for both sexes.
 6. Women employees are not penalized in their conditions of
- 6. Women employees are not penalized in their conditions of employment because of time away from work on account of child bearing. Following childbirth and upon signifying intent to return within a reasonable time, such female employees are

reinstated to their original jobs or positions of like status and pay without loss of service credit.

- The wage schedule and job classifications of the University are not related to or based on the sex of the employee.
- 8. The University has issued policies and guidelines to ensure an educational and work environment that is free from sexual harassment.
- 9. The University has taken the above steps to alleviate sex discrimination within the institution. Those employees who believe they have been discriminated against on the basis of sex may use the appropriate internal grievance procedure.

Guidelines on Discrimination on the Basis of Religion or National Origin

Members of various religious and ethnic groups, primarily but not exclusively of Eastern, Middle and southern European ancestry, such as Muslim, Jewish, Catholic, Italian, Greek and Slavic groups, continue to be excluded from executive, middle management and other job levels because of discrimination based on their religion or national origin. Under the Equal Opportunity Clause contained in section 202 of Executive Order 11246 as amended, the University of Missouri-Kansas City does not discriminate against employees or applicants for employment because of religion or national origin, and employees are treated during employment without regard to their religion or national origin. To ensure this, the University of Missouri-Kansas City has taken the following steps:

- 1. The Universitys Office of Equal Opportunity/Affirmative Action and its internal and external communications media have made known that equal employment opportunity without regard to religion or national origin is the policy of the University. All employees of the University must be committed to equal employment for all persons without regard to religion or national origin.
- 2. In all of its recruitment sources, the University of Missouri-Kansas City expresses that it is committed to equal employment opportunity without regard to religion or national origin.
- 3. Through local and national publications, as well as through its Web site job listings at http://www.umkc.edu/html/acjobs and http://www.umkc.edu/adminfinance/hr/jobs/index.asp, the University informs the public, including community, religious and ethnic groups, of employment opportunities available at the University of Missouri-Kansas City.
- 4. The University of Missouri-Kansas City accommodates the religious observance and practices of all employees when reasonably possible.
- 5. The University has taken the above steps to eliminate discrimination based on religion or national origin. Employees who believe they have been discriminated against on the basis of religion or national origin may use the University's internal grievance procedures.

Guidelines on Sexual Harassment

(Executive Order No. 20, 3-17-81; 330.060 Sexual Harassment; Bd. Min. 3-18-93.)

This policy is also available at

http://www.umsystem.edu/uminfo/rules/personnel/330060.htm.

This University of Missouri policy aims for an increased awareness regarding sexual harassment by making available information, education and guidance on the subject for the University community.

A. Policy Statement. It is the policy of the University of Missouri, in accord with providing a positive, discrimination-free environment, that sexual harassment in the work place or educational environment is unacceptable conduct. Sexual harassment is subject to discipline, up to and including separation from the institution.

B. Definition. Sexual harassment is defined for this policy as either

- 1. Unwelcome sexual advances or requests for sexual activity by a University employee in a position of power or authority to a University employee or a member of the student body, or
- 2. Other unwelcome verbal or physical conduct of a sexual nature by a University employee or a member of the student body to a University employee or a member of the student body, when:

- Submission to or rejection of such conduct is used explicitly or implicitly as a condition for academic or employment decisions; or
- b. The purpose or effect of such conduct is to interfere unreasonably with the work or academic performance of the person being harassed; or
- c. The purpose or effect of such conduct, to a reasonable person, is to create an intimidating, hostile, or offensive environment.

C. Non-Retaliation. This policy also prohibits retaliation against any person who brings an accusation of discrimination or sexual harassment or who assists with the investigation of sexual harassment. Notwithstanding this provision, the University may discipline an employee or student who has been determined to have brought accusation of sexual harassment in bad faith.

D. Redress Procedures. Members of the University community who believe they have been sexually harassed may seek redress, using the following options:

- 1. Pursue appropriate informal resolution procedures as defined by the individual campuses. These procedures are available from the campus Equal Opportunity/Affirmative Action Officer.
- 2. Initiate a complaint or grievance within the period of time prescribed by an applicable grievance procedure. Faculty are referred to Section 370.010, "Academic Grievance Procedures"; staff to Section 380.010, "Grievance Procedure for Administrative, Service and Support Staff" and students to Section 390.010, "Discrimination Grievance Procedure for Students". Pursuing a complaint or informal resolution procedure does not compromise one's rights to initiate a grievance or seek redress under state or federal laws.

E. Discipline. Upon receiving a charge of sexual harassment against a member of faculty, staff, or student body, the University will investigate and, if substantiated, will initiate the appropriate disciplinary procedures. There is a five year limitation period from the date of occurrence for filing a charge that may lead to discipline. An individual who makes an accusation of sexual harassment will be informed:

- 1. At the close of the investigation, whether or not disciplinary procedures will be initiated; and
- 2. At the end of any disciplinary procedures, of the discipline imposed, if any.

Minimum Standards of Progress for Veterans

Veterans Affairs regulations require that all veterans drawing VA educational benefits at UMKC must comply with the Veterans Affairs Minimum Standards of Progress. These standards dictate that the veteran must be making satisfactory progress toward a degree while enrolled. The University's academic and probation policies have been approved by the Veterans Affairs as those Minimum Standards of Progress and are as follows:

Undergraduate Student

Undergraduate degree-seeking students' academic status is assessed at the end of every term, whether the student is full-time or part-time for that term. A summer session is considered the same as a semester for the purpose of the following regulations:

- In general, students will be placed on academic probation whenever their official UM grade-point average falls below 2.0 (C average). Some academic units may have a higher grade-point average requirement. New freshman admitted to UMKC on the basis of high school records, who have grade-point averages between 1.50 and 1.99 at the end of the first semester of either full- or part-time study will be placed on academic warning. Students on academic warning must achieve an overall C average by the end of their second semester or be placed on regular probation. They then would be subject to the regular probation requirements.
- 2. Students on academic probation will be restored to good standing whenever the UM grade-point average reaches 2.0 or the GPA level established by their academic units.

- 3. Students on academic probation must maintain the grade-point average required by their academic units during each subsequent semester or summer session while they are on probation. Otherwise, they are ineligible to re-enroll without the approval of the academic units.
- 4. Students on academic probation must remove themselves from probation within three successive semesters (including the semester in which they originally were placed on probation). Otherwise, they are ineligible to re-enroll without the approval of the academic units.
- 5. Students are responsible for knowing their academic status by referring to the term grade reports and their permanent academic records in the UMKC Records Office.

Graduate and Professional Students

Because there may be some variation in the academic and probation policies in the various graduate and professional schools within the University, reference should be made to the appropriate sections in this catalog.

Conduct

Institution policy relating to conduct for veteran students is the same as for all other students. Statement of requirements is shown elsewhere in this catalog.

Student Records

Adequate records are kept by the school to show the progress of each eligible veteran. The records are sufficient to show continued pursuit at the rate for which enrolled and the progress being made.

These records include the final grade in each subject completed and a record of the date of withdrawal from any class the veteran does not complete. The last date of attendance must be reported to the Veterans Affairs.

No veteran will be considered to have made satisfactory progress when the veteran fails all subjects undertaken except with a show of mitigating circumstances, when enrolled in two or more unit subjects. This is immediately reported to Veterans Affairs. The determination for the continuance of benefits is made by the regional office of the Veterans Affairs.

Discrimination Grievance Procedure for Students

(390.010 Discrimination Grievance Procedure for Students; Bd. Min. 12-17-82, Bd. Min. 1-25-90, Amended Bd. Min. 10-16-03)

This policy is also available at

http://www.umsystem.edu/uminfo/rules/grievance/390010.htm.

A. General

- It is the policy of the University of Missouri to provide equal opportunity for all enrolled students and applicants for admission to the University on the basis of merit without discrimination on the basis of their race, color, religion, sex, sexual orientation, national origin, age or disability, or Vietnam era veteran status. Sexual harassment shall be considered discrimination because of sex. This policy shall not be interpreted in such a way as to violate the legal rights of religious organizations or military organizations associated with the Armed Forces of the United States of America.
- To insure compliance with this policy, all University of Missouri prospective or enrolled students shall have available to them this student discrimination grievance procedure for resolving complaints or grievances regarding alleged discrimination.
- 3. This grievance procedure neither supersedes nor takes precedence over established University procedures of due process for any and all matters related to Academic Dishonesty, Grade Appeals, Traffic Appeals, Disciplinary Appeals, or other specific campus procedures which are authorized by the Board of Curators and deal with faculty/staff responsibilities.
- 4. These proceedings may be terminated at any time by the mutual agreement of the parties involved. **Note:** A grievance concerning specific incidents filed under this discrimination grievance procedure shall not be processed on behalf of any student who elects to utilize another University grievance procedure. In addition, the filing of a grievance under these procedures precludes the subsequent use of other University grievance or appeals procedures for the same incident.

B. Definitions

- A complaint is an informal claim of discriminatory treatment. A complaint may, but need not, constitute a grievance. Complaints shall be processed through the informal procedure herein set forth.
- 2. A Grievance is the written allegation of discrimination which is related to:
 - a. Recruitment and admission to the institution.
 - b. Admission to and treatment while enrolled in an education program.
 - c. Employment as a student employee on campus.
 - d. Other matters of significance relating to campus living or student life, including, but not limited to: assignment of roommates in resident halls; actions of fraternities and sororities; membership in or admission to club/organizations; student health services; and financial aid awards.
- 3. A student is any person who has applied for admission or readmission, or who is currently enrolled, or who was a student of the University of Missouri at the time of the alleged discrimination.
- 4. Persons with disabilities–For the purpose of this student discrimination grievance procedure, a "person with a disability" has been substituted for "handicapped individual" (Section 504, Rehabilitation Act of 1973) and shall be defined as ". . . any person who:
 - a. Has a physical or mental impairment which substantially limits one or more of such person's major life activities;
 - b. Has a record of such impairment; or
 - c. Is regarded as having such an impairment." For purpose of this definition, "major life activity" means any mental or physical function or activity which, if impaired, creates a substantial barrier to employment or education. Any reference in this document to written materials or to written or oral presentations within the student discrimination grievance procedure may be adjusted to accommodate persons with disabilities for whom the stated materials or required presentations would not be appropriate. Cost of such accommodation will be borne by the University, with no charge to the individual.
- 5. Appropriate Administrative Officer The primary administrative officer on the staff of the Chancellor (in the area of Student Affairs/Services, Administrative Services, Development, and Academic Affairs) having administrative responsibility for the unit in which the discrimination is alleged to have occurred.
- Grievance Consultant At any step the Director of Equal Opportunity or of Affirmative Action may be asked to serve as a consultant by any of the parties involved in this grievance procedure.

C. Complaints

- Policies and Procedures A student with a complaint will be provided with copies of appropriate policies and procedures pertaining to student complaints and grievances, and the Chief Student Personnel Administrator or his/her designee and the Officer for Equal Opportunity/Affirmative Action shall be available to assist the student in understanding the opportunities afforded through such policies and procedures. The student may choose to have an adviser participate in any stage of the grievance procedures, subject to the restrictions of the hearing procedures set forth in Section 390.010 F.
- 2. Joint Complaint If more than one student is aggrieved by the same action, these students may, by mutual written agreement among themselves, file with the Chief Student Personnel Administrator a complaint and pursue their complaints jointly under this grievance procedure. If the number of students in such a case is so large as to make it impractical for them to be heard individually in a joint proceeding, they may, by mutual agreement, elect one or more of their number to act on behalf of them all.
- 3. Students may informally discuss a complaint with the relevant supervising administrator. Every reasonable effort should be made to resolve the matter informally at this administrative level. If a satisfactory resolution is not reached, the student may

pursue the matter through each level of administrative jurisdiction up to and including the Appropriate Administrative Officer, or file a grievance within the time specified in D.1.b.

- 4. Complaints Involving Recruitment
 - a. Undergraduate applicants must first present complaints about recruitment to the Director of Admissions. If a satisfactory resolution is not reached, the applicant may appeal the matter to the immediate supervising officer of the Director of Admissions.
 - b. Applicants for graduate study may request a meeting with the academic department head and the Dean of the College, or their designees, who are actually involved in the recruitment effort to discuss the matter informally. If a satisfactory resolution is not reached, the applicant may appeal to the Dean of the Graduate School and finally to the Appropriate Administrative Officer.
- 5. Complaints Involving Admissions (Undergraduate or Professional)
 - a. Undergraduate and professional student applicants shall present complaints to the Director of Admissions or to the Dean of the School or College, depending upon where the application was originally filed.
 - b. This University official shall compare the person's academic qualifications against the official University admissions criteria and review the denial. If the denial is sustained, the applicant may appeal this decision to the official's immediate supervisor or to the appropriate admissions committee.
- 6. Complaints Involving Admissions (Graduate) Applicants to the Graduate School may ask for a meeting with the academic department head of the program to which the applicant was seeking admission. This official shall explain the reasons for the denial of recommendation for admission. If a satisfactory resolution is not reached, the applicant may then appeal to the Dean of the Graduate School or to the appropriate admissions committee. If the denial is upheld, the applicant may appeal the decision to the appropriate administrative officer.
- Complaints Involving Admissions to or Treatment in an Educational Program or in the Granting of Assistantships – An undergraduate or graduate student enrolled at the institution who has a discrimination complaint involving admission to or treatment in an educational program or in the granting of assistantships may request a conference with the appropriate department head and with the Dean of the School or College (or the Dean's designee) to discuss the matter informally. If a satisfactory resolution is not reached, the student may present a grievance pursuant to Section 390.010 F.
 Complaints Involving Non-academic Matters Related to Campus
- 8. Complaints Involving Non-academic Matters Related to Campus Living and Student Life A currently enrolled student who has a University-related complaint concerning discrimination in non-academic matters including but not limited to assignment of roommates, actions of fraternities and sororities, membership in or admission to clubs/organizations, student health services and financial aid awards, may request a conference with the appropriate administrative supervisor, department head or director to discuss the matter informally. If a satisfactory resolution is not reached, the student may present a grievance pursuant to Section 390.010 D.
- 9. Complaints Involving Student Employment on Campus A student enrolled at the University who alleges that discrimination occurred either in applying for work or while working as a student employee at a University job may request a conference with the supervisor, department head or director of the employing unit to discuss the matter informally. If a satisfactory resolution is not reached, the student may present a grievance pursuant to Section 390.010 D.
- Complaints Involving Financial Aid (Undergraduate, Graduate, Professional):
 - a. Undergraduate, graduate and professional student aid applicants shall present complaints to the Director of Student Financial Aid where the application was originally filed or the award originally made.
 - b. This University official shall compare the person's financial and academic qualifications against the official University financial aid criteria and review the award

amount or denial of the aid. If the original judgment is sustained, the applicant may appeal this decision to the official's immediate supervisor or to the appropriate financial aid committee.

D. Initiating a Grievance

- Policies and Procedures A student with a grievance will be provided copies of appropriate policies and procedures pertaining to student complaints and grievances, and the Chief Student Personnel Administrator or designee, and the Officer for Equal Opportunity/Affirmative Action, shall be available to assist the student in understanding the opportunities afforded through such policies and procedures. The student may choose to have an adviser participate in any stage of the grievance procedure, subject to the restrictions of the hearing procedures set forth in Section 390.010 F.
 - a. Joint Grievance If more than one student is aggrieved by the same action, these students may, by mutual written agreement among themselves, file with the Chief Student Personnel Administrator a grievance and pursue their grievances jointly under this grievance procedure. If the number of students in such a case is so large as to make it impractical for them to be heard individually in a joint proceeding, they may, by mutual agreement, elect one or more of their number to act on behalf of all of them.
 - b. Regardless of their nature, all discrimination grievances are to be filed with the Chief Student Personnel Administrator. A grievance must have been filed by a student within one-hundred-eighty(180) calendar days of the date of the alleged discriminatory act.
- 2. Filing a Grievance
 - a. All grievances must be presented in writing and contain the following information:
 - (a) A clear concise statement of the grievance which includes the name of the person(s) against whom the grievance is made, the date(s) of the alleged discrimination and a statement describing the specific supporting evidence;
 - (b) A brief summary of the prior attempts to resolve the matter, which includes the names of persons with whom the matter was discussed, and the results of those previous discussions;
 - (c) A specific statement of the remedial action or relief sought.
 - b. Within seven (7) working days, the original grievance form with an explanation will be returned to the student if, in the judgment of the Chief Student Personnel Administrator, the statements are vague or do not meet the above requirement. The student may make the necessary corrections and resubmit the grievance within seven (7) days.
- 3. Any grievance not filed within the time limits specified in Section 390.010 D.1.b shall be deemed waived by the grievant. The Chief Student Personnel Administrator may extend the time limits only if adequate cause for an extension of the time limits can be shown by the student.
- For informational purposes, copies of the grievance shall be forwarded to the Appropriate Administrative Officer and the Director of Equal Employment/Affirmative Action.
- 5. Within fifteen (15) working days of receipt of a grievance that satisfies the requirement of Section 390.010 D.l.b, the Appropriate Administrative Officer, with the consent of the parties involved, may establish an informal hearing with the aggrieved student, the responding faculty/staff/organization, the respondent's supervisor and the Appropriate Administrative Officer's designee. The Appropriate Administrative Officer shall not involve himself/herself in this meeting. If the informal means of resolving the grievance fails, a grievance committee will be impaneled as called for in Section 390.010 E.1.

E. Formation of a Grievance Committee

1. It is the Appropriate Administrative Officer's responsibility to initiate the selection of the grievance committee within fifteen (15) working days after the request for the formation of a

grievance committee, or after the completion of the informal hearing provided for in Section 390.010 F.5 without satisfaction to the grievant.

- 2. A grievance hearing panel shall be established by October 1 of each year from which a grievance committee should be constituted. The panel shall consist of ten (10) faculty, ten (10) staff and ten (10) students. Selection of the panel will be made by the Chief Student Personnel Administrator from recommendations by the appropriate faculty, staff and student associations. Selection of membership will consider sex, race, disability, academic rank, student classification and employee classification. Membership on the hearing panel shall be for two years. A member's term shall expire on September 30 of the second year unless he/she is serving at that time on a hearing committee still in the process of reviewing an unresolved grievance. In such case, the member's term shall expire as soon as the committee has submitted a written report of its findings and recommendations to the Appropriate Administrative Officer.
- 3. A hearing committee shall be composed of five (5) members. The grievant shall select two (2) members from the grievance hearing panel provided by the Chief Student Personnel Administrator. The responding faculty/staff/organization shall select two (2) members from the grievance hearing panel. Both parties should have their selections made within 15 working days of the receipt of the request. The four committee members shall then select an additional member from the grievance hearing panel to serve as chair. Neither members of the immediate departmental unit nor student members of pertinent student organizations involved in the grievance shall be eligible to serve on the committee.
- 4. Any person selected to a grievance committee will be expected to serve on such committee and to be present at all sessions. If a member is absent from a single session, that person will be required to review all tapes or transcribed proceedings of that session prior to the next meeting of the committee. Should a member be absent from two sessions or should a member request to be excused from service for reasons of illness, necessary absence from the campus or other hardship, then the member shall be replaced in the same manner used in the original selection (see Section 390.010 E.3). If a member is unable or ineligible to serve for whatever reason, the replacement shall review all tapes or written transcripts and all submitted evidence prior to service on the committee. Five members of the hearing committee, duly selected as in Sections 390.010 E.3 and E.4 must attend the opening and closing session of the hearing.

F. Hearing Procedures for Formal Grievances

- 1. It shall be the responsibility of the Appropriate Administrative Officer to coordinate the procedures contained herein, to make provisions for hearing rooms, to coordinate secretarial and recording services and to otherwise serve the grievance committee as needed.
- 2. At the first organizational meeting of the grievance committee, the committee shall elect a chairperson from among the members to preside over subsequent meetings. Then the chairperson shall schedule a hearing at the earliest convenient time when all affected parties can be present.
- 3. A quorum consists of a minimum of four members of the committee except as provided by Section 390.010 E.4.
- 4. The grievance committee shall invite the grievant and the responding person to all hearings. Attendance at the hearings shall be limited to persons who have an official connection with the case as determined by the chairperson. The grievant and the responding person may choose to be accompanied by an adviser. Others whose participation in the hearing is considered essential in order to assist the committee in establishing the facts of the case shall appear before the committee only long enough to give testimony and to answer questions of committee members.
- 5. It is within the duties and responsibilities of all members of a grievance committee to commit themselves to observe procedures consistent with fairness to all parties concerned. For example, it is a matter of principle that members of the grievance committee will not discuss a case with anyone outside of the hearing process and that their finding will not be influenced by anything other than the evidence presented to them in meetings in which all affected parties are present.

- 6. The grievance committee shall set forth the rules of procedure for the hearing within the guidelines set forth herein. The chairperson may, for good cause and with the concurrence of a majority of the entire committee, authorize deviation from the suggested format, in which case the principal parties shall be notified.
 - a. The grievant shall be heard first in all phases of a grievance hearing and shall be primarily responsible for the presentation of his/her position.
 - presentation of his/her position.
 b. The adviser of the grievant or respondent may advise that person and may briefly explain his or her position but shall not be permitted to testify or to cross-examine.
 - A reasonable time limit should be established for opening and closing statements and shall be announced prior to the hearing.
 - d. Length of hearing sessions may be established in advance; every effort should be made to conduct the hearing as expeditiously as possible, with equal fairness to both parties.
 - e. The interested parties shall provide the chairperson with the names of the adviser and potential witnesses at least forty-eight (48) hours prior to the hearing. It is the responsibility of the interested party, working with the chairperson, to ensure the presence of these individuals in a timely manner.
 - f. After initial witnesses for both parties have been heard, such witnesses may be recalled for additional questioning if requested by either party or the grievance committee. The committee may call new witnesses whose testimony it deems relevant or helpful.
 - g. In order to promote the truthful, unfettered exchange of information and ideas, all testimony pertaining to the grievance hearing shall be held in confidence.
 - h. Only evidence relevant to the grievance may be introduced. Questions regarding the admissibility of evidence shall be decided by the chairperson.
- 7. At any point in the proceedings prior to the time at which the committee reaches its final decision, the grievant may withdraw any portion or all of the grievance with the consent of a majority of the committee members and of the respondent. In all cases of withdrawal at the consent of the committee and of the respondent, the grievant shall not have the privilege of reopening the same grievance at any time in the future. In the event that the student refuses to participate further in the committee hearing, the committee may choose to continue the case or to move to closure with an appropriate closing statement as per Section 390.010 F.9.
- 8. A confidential tape recording of the grievance hearing shall be made and will be accessible to the parties involved, the committee, the Appropriate Administrative Officer, the Chancellor, the President, members of the Board of Curators and authorized representatives on a need-to-know basis. Either party to the grievance may request that the committee provide a written transcript of testimony. The cost of preparation of such a transcript is to be paid by the party making such request unless Section 390.010 B.4 is applicable. After the report of the grievance committee has been prepared, the tapes and relevant materials will be sealed and filed in the Appropriate Administrative Office. Unless extraordinary circumstances apply, these materials will be destroyed at the end of five years.
- 9. At the conclusion of the grievance hearing, the members of the grievance committee shall meet in closed session to deliberate upon their findings. A majority vote of the entire committee shall be required on all decisions. The grievance committee shall make a written report on findings and recommendations to the Appropriate Administrative Officer of the University, with copies to the grievant(s) and the responding person(s). The written report will contain:
 - a. A statement of the purpose of the hearing,
 - b. Issues considered,
 - c. A summary of the testimony and other evidence presented,
 - d. Findings of fact as developed at the hearing, and
 - e. Recommendations for final disposition of the case.
- 10. The Appropriate Administrative Officer will make his/her decision. This decision and the actions that have been taken

shall be presented to both parties in writing. If the administrative officer does not accept the recommendations of the grievance committee, a written statement of the reasons for so ruling must be given to both parties and to the chairperson of the committee.

- 11. If requested by the grievant or the responding party, normally within seven (7) calendar days of the notification of the decision, the decision of the Appropriate Administrative Officer may be subject to a review of the records by the Chancellor. Any review and decision by the Chancellor shall be made normally within thirty (30) calendar days. The decision of the Chancellor can be appealed to the President, who shall have thirty (30) calendar days in which to make a decision, which shall be final.
- 12. Grievances shall receive prompt attention. The hearing and the report of the grievance committee shall normally be completed within sixty (60) calendar days of the formation of the grievance committee, and a final decision shall be made by the Appropriate Administrative Officer normally within ten (10) calendar days thereafter. In any case in which these time schedules should prove to be inadequate, the committee shall present, in writing, an amended time schedule to all parties involved.

Student Discrimination Grievance Procedure Form

(Use additional sheets if needed)

1. Your Name:

Check One: Male____ Female____

Student I.D. No .:

Mailing Address:

City, State, Zip Code:

Telephone:

2. Submitted to (Campus specific title for Chief Student Personnel Administrator):

On (Month/Day/Year):

3. The basis for the grievance is alleged discrimination on the basis of (Race/Color/Religion/Sex/National Origin/Age/Disability):

4. University official or unit against whom this grievance is filed (Name/ Department):

5. Explain in a clear and detailed statement the following:

a. The nature of the grievance and a description of specific supporting evidence:

b. The specific remedial action or relief sought:

For grievances alleging discrimination to admission and/or treatment while enrolled in an educational program, employment on campus, or other matters of consequence relating to campus living or activities. c. A summary outlining with whom the point(s) of dissatisfaction were discussed and with what results:

6. Date you consider the "Informal discussion" ended: I HAVE READ AND UNDERSTAND THE ABOVE GRIEVANCE FORM AND GRIEVANCE PROCEDURE FOR STUDENTS. THIS GRIEVANCE I AM FILING IS TRUE TO THE BEST OF MY KNOWLEDGE, INFORMATION, OR BELIEF. Signature Date

This form forwarded to (Appropriate Administrative Officer): On (Month/Day/Year):

By (Campus-specific title for Chief Student Personnel Administrator): (Campus Address)

Suggested Format for Hearing

I. Opening remarks accompanied by written submission of parties' outlines of relevant, non-redundant evidence to be offered to committee.

- a. Grievant
- b. Respondent

II. Consideration of any decision on objections to acceptance of items of evidence.

- III. Presentation of relevant, non-redundant evidence.
- a. Grievant (with additional questions from Respondent and/or committee)
 - 1. Witnesses
 - 2. Non-testimonial evidence
- b. Respondent (with additional questions from Grievant and/or committee)
 - 1. Witnesses
 - 2. Non-testimonial evidence

- IV. Opportunity for presentation of any rebuttal evidence.
- a. Grievant
- b. Respondent
- V. Presentation of additional evidence requested by committee.
- VI. Summation of case
- a. Grievant
- b. Respondent

UM System Policy on Maintaining a Positive Work and Learning Environment

(330.080 Maintaining a Positive Work and Learning Environment; Executive Guideline No. 3, 7-18-97; Executive Order No. 3 replaced by policy stated in Bd. Min. 1-29-99.)

This policy is also available at

http://www.umsystem.edu/uminfo/rules/personnel/330080.htm.

- 1. The University of Missouri is committed to providing a positive work and learning environment where all individuals are treated fairly and with respect, regardless of their status. Intimidation and harassment have no place in a university community. To honor the dignity and inherent worth of every individual – student, employee, or applicant for employment or admission – is a goal to which every member of the university community should aspire and to which officials of the University should direct attention and resources.
- 2. With respect to students, it is the University's special responsibility to provide a positive climate in which students can learn. Chancellors are expected to provide educational programs and otherwise direct resources to creative and serious measures designed to improve interpersonal relationships, to help develop healthy attitudes toward different kinds of people, and to foster a climate in which students are treated as individuals rather than as members of a particular category of people.
- 3. With respect to employees, the strength we have as a university is directly related to maintaining a positive work environment throughout the institution. The University should provide a positive recruiting and work environment focused on the duties and skills of the work to be performed. It is the expectation of the University that all employees and potential employees will be treated on the basis of their contribution or potential contribution without regard to personal characteristics not related to competence, demonstrated ability, performance, or the advancement of the legitimate interests of the University. The General Officers are expected to provide training programs for supervisors to assist in achieving this objective.
- 4. With respect to violations of the policy, faculty, staff and students may utilize their respective grievance procedures approved by the Board of Curators. The approved grievance procedures are as follows: Grievance procedure in Section 370.010 for faculty; grievance procedure in Section 380.010 for staff; and grievance procedure in Section 390.010 for students, and each such procedure shall be deemed as amended to include grievances filed under this policy. This policy shall not be interpreted in such a manner as to violate the legal rights of religious organizations, or military organizations associated with the Armed Forces of the United States of America.

UM System Information

Campus locations: Kansas City, Columbia, Rolla, St. Louis

Total enrollment (fall 2002): 60,903; 74.1 percent undergraduates, 25.9 percent graduate and professional students

Web site: http://www.umsystem.edu

Degrees granted (2001-02): 11,645

Teaching and research staff: 10,610; 44.6 percent full-time, 55.4 percent part-time

Administrative, service and support staff: 15,636; 74.5 percent full-time, 25.5 percent part-time

Libraries: Total holdings of 5,890,174 volumes, 10,460,406 microforms, 28,158 periodicals

Student financial aid: \$400,833,575 in grants, loans, work programs, scholarships, fellowships and other government aid awarded to 45,300 students in fiscal year 2002

Land holdings: 19,387 acres

Campus Information

Inquiries regarding admission to the other three campuses of the University of Missouri should be directed to the following addresses. Phone numbers are also listed.

University of Missouri-Columbia

Director of Admissions 230 Jesse Hall Columbia, MO 65211 (800) 225-6075 mu4u@missouri.edu http://prospectivestudents.missouri.edu

Academic Units

College of Agriculture, Food and Natural Resources College of Arts and Sciences College of Business College of Education College of Engineering College of Human Environmental Sciences College of Veterinary Medicine School of Accountancy School of Fine Arts School of Health Professions School of Information Science and Learning Technologies School of Journalism School of Law School of Medicine School of Music School of Natural Resources School of Nursing School of Public Affairs School of Social Work Graduate School Honors College Extension Division

University of Missouri-Rolla

Director of Admissions University of Missouri-Rolla 106 Parker Hall

Rolla, MO 65409 (800) 522-0938 umrolla@umr.edu http://admissions.umr.edu

Academic Units

College of Arts and Sciences School of Engineering School of Management and Information Systems School of Mines and Metallurgy Office of Continuing Education

University of Missouri-St. Louis

Director of Admissions University of Missouri-St. Louis 351 Millennium Student Center St. Louis, MO 63121 (314) 516-5451 admissions@umsl.edu http://www.umsl.edu/admission

Academic Units

College of Arts and Sciences School of Nursing and Health Studies College of Business Administration College of Education College of Fine Arts and Communication College of Optometry Evening College Continuing Education Outreach Graduate School Honors College St. Louis/Washington University Joint Undergraduate Engineering Program Continuing Education and Outreach

University Outreach and Extension

http://outreach.missouri.edu

University Outreach and Extension is the statewide educational outreach arm of the UM System, and focuses the resources of the University on high-priority needs at the local level. These priorities are enhancing the economic viability of Missouri's firms, farms and communities; and creating and sustaining healthly environments.

Programs are delivered in cooperation with University Outreach and Extension councils in every Missouri county. University faculty headquartered in county extension centers rely on the knowledge and resources of faculty on all four UM campuses, plus Lincoln University, to create educational programs to meet local needs.

University Outreach and Extension faculty use the Internet, video and audio conferencing; CDs, group meetings, short courses and workshops, independent studies, and one-to-one consultation to bring educational programs to the citizens.

University Outreach and Extension links University faculty and staff with local citizens through the statewide TeleCenter Network. The 10 network sites use interactive video and other distance-learning technologies to deliver credit and non-credit education to students at times and places convenient for them.